ULTIMATE GUIDE TO SOAP MAKING

START YOUR OWN BUSINESS AND MAKE MONEY

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Introduction

There is nothing quite as satisfying as creating something with your own hands. In today's over-commercialized world, it's easy to forget that once upon a time, we made our own staples: we grew our own grain and milled it into flour; we grew our own corn; we milked our own cows; and we made our own cleaning products.

Today, autoimmune disorders, childhood developmental disorders, and allergies are rising sharply in the industrialized countries but not in the lesser-developed parts of the world. Granted, they have their own worries - but it's striking that the rate of allergy in the industrialized world is 30% (one in three people!) while in the third world, it's virtually unheard-of even though peanuts in the form of peanut milk and peanut butter are among the first foods offered to infants. Some point to an obsession with hygiene, saying that childhood exposure to a combination of animals, plants, and dirt (what we sometimes call "Nature") is needed for a fully mature, fully functioning, and fully stable immune system but people in the third world also practice hygiene. Just try walking into an East Indian or African peasant woman's house with dirty shoes to learn the truth of that! This is why many people are taking a closer, harder look not at cleaning, but at what is in the cleaners.

"That dreaded soap scum!!!" intones an announcer ominously while a woman's eyes flare wide in humiliated horror.

"Those dirty rings!" groans a woman in despair before she ogles the camera with a shake of her head and a rueful smile.

"Kills 99.9% of household viruses and bacteria!" and thousands of little cartoon bugs die dramatically.

Unlike soap made at home, many commercially-produced bars have had the glycerin stripped out, a process that leaves them harsh and drying to the skin. To fix that, moisturizers of lesser quality are put in. The scents and dyes are synthetic - this is great for long-lasting smell and good looks, but not only are many of the fragrances and dyes harmful to humans, but also the word "fragrance" can cover up a lot of sins: something in the batch not quite according to the rules? "Oh, it's a fragrance stabilizer <shifty eyes>". Another effect of all these drying agents is itchy skin which can be soothed by... bathing again!

While we don't want our children walking around looking like homeless waifs, we also don't want their tiny bodies and delicate neural systems exposed to an onslaught of toxic, bioaccumulative chemicals. It makes sense, then, to do what we can to return to a more natural way of life and that means spending a few hours every few months to make our own soap: smoothing, softening, nutritive soap that doesn't have any of the 'X-' and 'Z-' loaded ingredients such as *butylated hydroxyanisole* and *triethanolamine.* We also have more control over what goes in the soap - teenager with acne? There's a soap for that. New baby in the home? There's a soap for that. Oily skin, dry skin, blotchy skin? Soap, soap, and soap. Shaving? Yep - there's even soap for that, too (after all, it's what we used before the invention of shaving cream in a can!).

Making soap used to involve a lot of trial and error - you want enough lye to convert as much of the fat as possible to soap but you don't want so much lye that the soap ends up harsh and burns the skin (probably how the "kids hate bath time" thing got started - who'd want to take baths if you knew it was going to hurt?). Once the saponification values of various oils were worked out, the end product was vastly improved but the front-end calculations got way more complex.

Today, no worries: there are many online calculators that can do all the math for you. Just plug in what it is you want and how much of it and the webpage will obligingly do all the math and spit out a prettily formatted recipe, all ready to go.

One thing has not changed, and that is the intrinsic nature of Sodium Hydroxide. It's still dangerous as all-get-out. ***Please*** pay close attention to the "Safety Protocols " sections. Go no further until you have memorized everything in them and follow the instructions! If you are prone to getting distracted while cooking dinner (e.g., you're forced to order in pizza because you forgot about the stew thanks to a rousing game of Candy Crush), then call a friend to help you keep on track and prevent what could be dire consequences.

Start with the simpler recipes, such as a Castile-type soap. This will allow you to become familiar with the process and what to expect at the various stages and you'll also begin learning the quirks that are unique to your soap. If a dozen soapmakers use the same recipe, the result will be a dozen variations: everything from the weather that day to the temperature of the room to the speed of the blender to how fast or slow the soap was cooled in the molds has an impact on the final product. That's why your soap will be special and unique - because it's made by you!

Once you've nailed the technique, move on to the more adventurous recipes and the more advanced techniques. If you want to inspire and involve your family, the Cool Projects section has a lot of fun things you can do safely, even with tiny tots!

I hope you find this book of value in introducing you to the fun, fascinating world of alchemical mystery that is soap-making.

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Soap Glossary of Terms

Additive	An ingredient that is not required for the saponification process. This includes scents, oils, medicaments, colorants, and therapeutic ingredients such as natural clay.
Caustic	A caustic is a chemical that can cause burning through chemical reaction as opposed to heat. Lye is a caustic, as can be determined by its alternate name, "caustic soda".
Deliquescence	from the Encyclopedia Britannia: "The process by which a substance absorbs moisture from the atmosphere until it dissolves in the absorbed water and forms a solution. Deliquescence occurs when the vapour pressure of the solution that is formed is less than the partial pressure of water vapour in the air. All soluble salts will deliquesce if the air is sufficiently humid."
Exothermic	Characterized by the release of heat, often due to a chemical reaction. Soap is made as the product of an exothermic reaction between lye and fat.
Flash Point	The temperature at which a flammable vapour will ignite.
Gel Phase	A phase some soaps go through when the thickened liquid becomes transparent briefly before cooling and returning to an opaque state.
Hygroscopic	Describes a material that can pull moisture from the air.
Lye	Sodium hydroxide or Potassium hydroxide, also called "caustic soda"
Lye Discount	A percentage of the lye normally required to completely saponify a given quantity of fat that is with-held from the process, ie: if there is a 5% discount, it means only 95% of the full amount of lye needed is used.
Lye Solution Preparation	The process of preparing the lye needed for saponification:

- Prepare in an area that is well-ventilated with fresh - not recycled - air, as the vapors released during this process contain lye molecules.
- If preparing large batches, either go outdoors or wear an appropriate respirator mask.
- Ensure running water and a sink are close by in case of emergency - if lye contacts skin, the area needs to be flushed with water for twenty minutes.
- The slightest bit of lye contacting the eyeball can cause blindness - always wear safety glasses or goggles.
- While stirring carefully, add lye slowly to cool water. *Do not* splash it! *Do not* add water to lye because it will result in an extremely dangerous Volcano Effect .
- Add it very slowly because the water will heat up. Do not allow the water to reach a boil - keep it at or below 190° F or 90° C. Monitor it with a calibrated thermometer. To lower the temperature if needed, set the pan in a bath of ice water or, if that's not an option, use ice-cold water or even ice cubes for part of the water needed.

Materials Not Suitable for Contact with Lye The following materials are examples of substances that must not come into contact with lye or lye-heavy soap. The following metals cause a chemical reaction with lye that results in highly explosive hydrogen gas:

1. Aluminum
2. Brass

3. Bronze
4. Chrome
5. Iron
6. Magnesium
7. Tin
8. Zinc
9. Really, most metals except stainless steel
10. Teflon-coated metal items.

Sugar will react with lye to produce carbon monoxide, also known as "the silent killer".

Materials Suitable for Contact with Lye The following are materials that are okay to use with lye at room temperature:

1. High-density polyethylene (HDPE)
2. Polypropylene (PP)
3. Polyvinyl chloride (PVC)
4. Silicon rubber
5. Stainless steel (also suitable for use at higher temperatures)
6. Glass
7. Porcelain.

Plastics may soften at higher temperatures and a test should be first made of their suitability.

Molecular Weight Oils:	"the amount of any substance that contains as many elementary entities (e.g., atoms, molecules, ions, electrons) as there are atoms in 12 grams of pure carbon-12 (12C), the isotope of carbon with relative atomic mass 12". Molecular weight is used to convert moles to mass in order to provide weights for soap recipes. The usual ratio of lye moles to fat moles is 3:1
Essential Oils	Volatile oils distilled, expressed, or dissolved from plant matter and used for various medicinal and cosmetic purposes.
Fixed Oils	Unlike volatile oils, fixed oils such as olive oil and coconut oil can be heated without evaporating. Because they are stable at high temperatures, they are often used to make soap.
Fragrance Oils	Used in scented soaps, fragrance oils may be all-natural or they may be a blend of synthetic scent and a carrier substance such as vegetable or mineral oil or propylene glycol.
pH	Used to determine if a substance is acid or alkaline and to what degree on a scale of 0 to 14, with 7 being neutral. Lye, being highly caustic, has a pH of 14 while water normally has a pH somewhere around 7. Fully cured soap should be anywhere from 8 to 10.
pH Strip Test	Strips of treated paper used to test pH levels. Follow the instructions on the packet diligently for most accurate results although it's not unusual for results to vary based on the person doing the interpreting.
pH Tongue Test	Touch a bit of soap to your tongue - if it burns, tingles, zaps, pinches, etc, it means there is still active lye in the soap and it must not be used.

Potassium Hydroxide (aka caustic potash, potash, potash lye, and potassium hydrate). Highly caustic, pH level14, used to react with fats and oils to create soap (usually liquid soap).

Safety Equipment The following must be used properly to ensure safety:

1. Eye protection
2. Face shield
3. Rubber gloves
4. Clothing covering any bare skin including arms, legs, feet, and throat
5. Ventilation equipment, particularly if cooking up large batches of lye solution
6. Smoke alarm
7. Fire extinguisher
8. Easy access to a telephone
9. First aid kit
10. Immediate source of fresh running water, such as from a sink or hose.

Saponification Process chemical reaction between fat and lye resulting in glycerin and soap.

To achieve the proper results, the proper ratio of 3 mols lye to 1 mol fat must be present.

1. Lye is dissolved in water, which breaks the bonds between the ions and results in three sodium ions with three hydroxyl groups. ("Sodium" x 3, "Hydroxide" x 3).
2. Next, a fat molecule is mixed with water which causes it to split its chemical bonds (a process called "hydrolysis"). This results in a free glycerol (a sugar alcohol) ion and three fatty acid tails.
3. Then the hydroxyl groups all bond to the one free glycerol ion to form a glycerin molecule.
4. Finally, the fatty acid tails each bond with one of the sodium ion to form three molecules of fatty acid salt, more commonly known as "soap".

If the ingredients have been measured out correctly, no lye will remain in the soap as it will all have been split apart and used to form soap molecules and glycerin. If too much lye is present, the result is "lye soap", which is very harsh. One technique is to "discount" the lye (use less than 100% of the amount needed for full saponification) or "superfat" the recipe (add a bit of extra fat or oil) , which means some fat or oil will be left over resulting in a softer, more moisturizing soap.

SAP Value SAP stands for "Saponification". The SAP value of a given fat is the amount of lye in milligrams needed to saponify one gram of the fat or oil. This is where you need to be precise: soap makers are usually referring to sodium hydroxide but sometimes a recipe calls for potassium hydroxide. It's important not to mix the two up. There are charts online that give the SAP value for many commonly-used oils and fat - just make sure you check if it's Sodium Hydroxide or Potassium Hydroxide you're looking at.

Seize	The point in the process at which the soap mixture is too thick to pour. It's no longer liquid and is turning solid.
Soap Making Process:	**Cold Process** relies on a long curing time to allow the lye to saponify naturally
Soap Making Process:	**Hot Process** uses a cooking phase to force saponification through to completion.
Soap Making Process:	**Melt and Pour** soaps are created by melting pre-fabricated soap bases over heat or in the microwave before mixing in the additives of choice. Lye is not required and the bases often have preservatives and stabilizers so they last longer and melt quickly.
Soap Making Process:	**Re-Batch Process** is when soap shavings (either hot or cold process) are cooked in water over a double boiler until melted into a thick, soupy, sloppy mess. The melted soap is removed from the heat and additives of choice are added in before the soap is molded up and allowed to cool and harden. The soap is left to harden for a week then sliced into bars, placed on drying racks, and left for several weeks to dry (it's a much wetter process than soap from new).
Soap Making Process:	**Warm Process** is somewhere between the Cold process and the Hot process: after molding, the molds are put in a low, slow oven for six hours, after which they are fully saponified and ready for use. They will however, be very soft so it's still best to let them cure for a week or so.
Sodium Hydroxide	(aka lye, ascarite, caustic soda, soda ash, soda lye, sodium hydrate, and white caustic). Highly corrosive with a pH of 14, sodium hydroxide produces a harder soap than potassium hydroxide.
Soap Storage	Store soap in a cool, dry place out of direct sunlight and well ventilated. Label each bar with the date and recipe used in order to keep well organized and not mix up cured with unfinished soap.
Superfat	By adding a certain excess of fat or by cutting back on the lye, some of the fat or oil does not get saponified. The soap produced is more moisturizing than one that is fully saponified. Be careful not to use too much, else the soap will develop "DOS", which stands for "Dreaded Orange Spots" which indicate the presence of pockets of spoiling fat or oil.
Trace	The point in the process of soap making when the soap mixture thickens up to the point that dragging a spoon through it or drizzling soap back into it leaves a visible mark on the surface.
Volatile	A substance that evaporates easily and at low temperatures. Most essential oils are extremely volatile.
Volcano Effect	The reason lye is mixed into water. If water is dumped onto lye, it causes a crust to form on top. Lye is exothermic (heat-generating) so the result is a rapidly heating crust sealing off a pile of dry sodium hydroxide. Heating and steam continue to build underneath, similar to an apple pie except when the steam builds up high enough under an apple pie crust, it releases in jets through weak points or vents that have been pre-cut. When steam builds up under a lye crust, the result is a volcanic explosion of superheated water, partly dissolved

lye, lye powder, and steam.
This is not a desirable thing to happen.

Waste Disposal

To dispose of waste left over from soap-making, always follow the procedures outlined on the packaging or on the Material Safety Data Sheet (MSDA) for the product in question, which can be found here: https://www.msds.com/ . To dispose of old oils, fats, spoiled soap, etc, contact your local waste disposal authority or recycling center.

Workplace Safety

Steps to take to ensure safety:

1. Keep your work area clean and organized
2. Make sure all ingredients and products are clearly and accurately labeled
3. Keep detailed notes of all procedures
4. Keep the work area well-ventilated
5. Keep children, pets, and those with poor motor control out of the work area and wherever supplies are stored.
6. Ensure a working telephone, a fire extinguisher, a ready source of running water are available at all times.

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Soap vs Detergents

Traditionally, "soap" was made with animal fat while "detergent" was made with non-animal sourced fats. Today, the accepted convention is that "soap" is made with natural fats, whether animal or vegetable in origin, while "detergents" are made with synthetics.

That being said, just because it is a "soap" doesn't mean it's "all natural" or "organic". Many soaps contain synthetic ingredients for reasons of cost-efficiency and quality: some essential oils can cost hundreds of dollars an ounce while the synthetic equivalent (fragrance oil) is less than twenty dollars. Essential oils tend to be volatile and the scent fades quickly while the synthetic equivalent lasts for the life of the soap. Synthetic dye, such as D&C, gives a brighter, stronger, truer color while natural-sourced colors can be unpredictable and unstable, changing color unexpectedly due to random circumstance during the soapmaking process or fading within a few months (especially if left exposed to light).

Natural substances can impact the recipe itself because so much more is required to achieve the desired result (eg, 3 Tbsp of powdered spice compared to 1 Tbsp of the essential oil or 1 tsp of the fragrance oil). This isn't always a factor, however, as people who are specifically looking for all-natural ingredients expect the color and scent to be less intense.

With soapmaking, the one thing that doesn't work is non-organic oil, such as mineral oil. Mineral oil and other such oils do not contain fat, therefore they cannot saponify. Add lye and all you get is a big ol' mess.

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What effect does soap have on the skin?

Nobody denies that we have to keep clean. You will never find a doctor (at least, not a reputable doctor) saying that it's perfectly fine and healthy to never bathe. An unwashed body is, frankly, disgusting. Leaving aside the grey, dull, dirt-tracked appearance, an unwashed body *reeks* .

And it's a matter of health: babies who are unbathed can become dreadfully ill - their chubby little bodies have rolls and in between the rolls are creases and crevices that, unless cleaned regularly, will build up a dreadfully odoriferous cheesy paste consisting of dead skin cells, rancid oil from the skin, sweat, dust and dirt, and possibly even caked-up baby formula or breast milk. This is the perfect culture in which to grow bacteria that can eventually cause the skin to break down, leaving it raw, red, oozing, and *itchy.* Unable to resist, the baby will try to scratch and can very easily damage the delicate, fragile skin and now the baby is vulnerable to infection because the skin is no longer an intact barrier to pathogens. Add to the systemic danger, an unwashed baby is a terribly uncomfortable and very unhappy baby - unhappy babies cry. All the time.

Washing the skin removes that nasty caked-on grossness, leaving the skin smooth and strong. The baby feels good and a happy baby is a relaxed, quiet baby.

Plain water is inadequate to properly clean. Sure, it'll knock off the particulates, but it will not have any effect on the oils and greases. To deal with them, we need to use cleansers, such as soap. Cleansers work because they contain "surfactants", compounds that surround bits of dirt and oil and render them soluble, meaning they can now be washed away by water. Not only does this keep the skin clean, but it also acts as a natural, gentle exfoliant, which is why people

who wash their face twice daily using a gentle, natural soap have radiant, glowing complexions and those that don't, dont'.

However, with the good comes the bad. Surfactants - used incorrectly or if the wrong type is chosen for the individual's skin - can also have a negative effect on the outer layer of the epidermis, called the stratum corneum:

- Washing too much or choosing a cleanser that's too harsh for the skin can cause tightness (called "After-Wash Tightness", or AWT for short). Despite what the marketing departments of various manufacturers would have us believe, this is not a sign of "true clean"; it's a sign that the cleanser is a bad fit for the user.
- Dryness - too much stress on the skin strips away the protective layer of oils resulting in dull, flaky, *itchy* skin.
- If the skin is stripped too much, it is no longer an effective barrier to pathogens and that is, after all, its primary function: keeping what makes us "us" inside and keeping everything else outside.
- Signs of sensitivity, including itching, irritation, and redness, are another indicator that the cleanser is the wrong one.
- Using too harsh a cleanser can impact the fats that are in the skin itself, causing a loss of that dewy youthful freshness and creating or exaggerating wrinkles and other signs of aging.

While there is no question that we need to wash ourselves, *what* we use to wash ourselves with is the problem - controversy rages over the substances found in commercial soap products, some of which were intentionally added and some, well, not so much. It's many of these added - mostly artificial - chemicals in commercial products that are causing the symptoms mentioned above. Many soap manufacturers strip the glycerin from the soap, as it is a valuable by-product. Without the glycerin, soap becomes far more drying, so other, cheaper, moisturizers and emollients are added. These don't function the same way - glycerin acts as a natural buffer that prevents damage from occurring. Synthetics act as a glue to try and repair damage that has occurred. They basically glue down the damaged layer of the skin then throw an oily layer over top of it to make it feel smooth. This has an unfortunate effect: one washes one's face and marvels at the soft, smooth skin; a little while later, the itching starts. So the face is washed again. And so on.

There are a number of skin conditions that will improve or even be healed by nothing more than regular washing with soap. The most common of these is teenage acne: washing with natural soap and using a gentle exfoliant such as a washcloth keeps the skin clean, open, and breathing freely; removes any inflamed pimples that were going to go anyway and then cleans them out so they don't get infected; and reduces the degree of flare-up by keeping the skin oils from building up.

Some skin conditions, such as eczema, require special handling - standard commercial cleansing bars, particularly those with a heavy, overbearing scent or anti-this and that properties often cause irritation and mad itching while others, such as natural olive oil soap, will soothe the inflamed tissues.

Allergies are always a concern, particularly in the developed world, where allergies are *far* more common than in undeveloped or underprivileged countries. Most often, the reaction is to the chemicals in the soap, such as the scent used or the color. Sometimes the reaction is to a natural

ingredient, such as peanut oil or apricots, but that's not as common as the reaction to artificial ingredients.

Making your own soap ensures that you have the *perfect* soap to meet each individual member of your family's needs.

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Popular Soap Brands and how they stack up

The following are some of the popular soap brands for North America and what users are saying - following up soap reviews gives you a good idea as to what today's consumer values in a soap product. Clicking the hyperlinks will bring up further detailed information.

Body Shop

Fans say:

" It's so creamy and rich that applying lotion is unnessary unless you have severely dry skin" (Shea Soap - Makeupalley.com)

"Gorgeous, thick, creamy and luxurious soap for winter bathing. not drying, smells great" (Shea Soap - Makeupalley.com)

"This soap is so fragrant that as soon as I opened it, it filled up my entire bathroom with a wonderful smell. The bar lathers up pretty well (I use a loofah). And it smells AMAZING! The smell lingers on my skin for the whole day" (Satsuma Soap - Makeupalley.com)

"I do find that frequent use of this soap throughout the day does leave my hands feeling tight and sometimes dry--usually in the winter. In addition, near the end of it's life cycle it requires extra water to build up a lather." (Satsuma Soap - Makeupalley.com)

"This soap was very rich in lather and soothing to the skin. It says strawberry but the scent was very very light...almost couldn't smell it." (Strawberry Soap - Amazon.com)

"Body Shop soap is the best. The scent doesn't fade after a few showers. Skin feels clean and fresh. No soap scum in shower" (Strawberry Soap - Amazon.com)

Critics say: with an EWG score of four to five for toxicity, the L'Oreal-owned "The Body Shop" is not as natural and organic as the advertising would have you believe. Further controversy centers around L'Oreal's animal-testing policies when The Body Shop claims to use no animal-tested ingredients.

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Burt's Bees

Fans say:

"Love it! It's got a good masculine smell to it and seems to break down any grime (Anti-perspiration, light grease, etc.) while rinsing off easily." (Natural Skin Care for Men Bar Soap - Amazon.com)

1. bar soap is easy to use - it's right there, no fumbling with too much or too little liquid in a bottle
2. mild, gentle, does not dry out baby's skin, no flaking of baby's skin
3. no weird "Burt's Bees" smell. I love this gentle smell, my baby is oh so sniffable and soft
4. great price and lasts " (Baby Bee Buttermilk Soap - Amazon.com)

Critics say: EWG's Skin Deep Cosmetics Database ranks Burt's Bees bar soaps as ranging from level one to level four (low to low-moderate) toxicity.

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Dial

Fans say:

"This soap lathers well, and I feel super clean after using it!...I would recommend this to a friend" (Anti-bacterial deodorant soap - drugstore.com)

"My dermatologist recommended this soap to me for in shower use. I can't believe how well it has worked for my sensitive dry skin. It smells wonderful and rinses completely off, which helps prevent blemishes. I can even use it on my face. The only qualm I have is it doesn't lather very well in hard water." (Anti-bacterial deodorant soap - drugstore.com)

"Many, many years ago, I developed a mild allergy to perfumes and fragrances - long story. Ever since, I had to say goodbye to all of them wonderful, moisturizing, deodorant, skin-conditioning, lathery soaps. It's been Pure & Natural or Basic for me when it comes to soap and unscented baby powder when it comes to deodorants...And, you know what? I feel much cleaner, more comfortable, fresher than 'before' Basic and, after more than 10 years of daily and almost-exclusive use I am unaware of any unwanted side-effects." (Basic by Dial - Amazon.com)

"This soap is the best that i have ever used i love the smell that it leaves on your skin" (Antioxidant Bar Soap - Cranberry, drugstore.com)

Critics say: Produced by the Dial Corporation, a subsidiary of Henkel AG & Co. KGaA (Henkel Consumer Goods Inc), Dial ranks from three to ten for toxicity on EWG's Skin Deep Cosmetics Database . Part of the concern are the ingredients used in the world's first antibacterial soap. Interestingly, it was a couple of chemists from a meat-packing company that invented Dial soap. The meat packing company, Armour, had been producing soap since the 1880s using the tallow that was a byproduct of their regular meat-packing business. The chemists added hexachlorophene in order to make Dial antibacterial. Turns out that the hexachlorophene was causing neurological damage in infant, so the FDA pulled it from the consumer market and banned its use. Dial then switched over to triclocarban , a synthetic antibacterial, which is considered low-moderate toxicity (score 3/10).

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Dove

Dove's ingredient list contains a mix of sythetic surfactants, soaps from vegetable oils including palm kernel oil, and tallow (animal fats), which means it cannot be classified as vegan.

Fans say:

"Dove is the only soap I've tried which doesn't dry me out like a piece of leather, give me a rash, or make me itch." (Beauty Bar - Makeupalley.com)

"Oh, how I love Dove Beauty Bar. I love the way it smells, the way it looks, and the soft fluffy clean lather I get from it. Many years ago I owned a home cleaning business (one of our city's first environmentally friendly services…) and I learned something very interesting from my employees. Our clients that had Dove soap in their showers had the cleanest showers. Cleaner tiles, cleaner glass and fixtures. " (Beauty Bar - dalybeauty.ca)

"I love this bar of soap. It takes makeup off with ease, smells lovely, won't irritate your skin, and feels just perfect! When my face was irritated from other cleansers, I used this. It doesn't cure acne, but it does soften your skin and calm it, which can definitely help acne calm down and what not." (Sensitive Skin - acne.org)

Critics say: Owned by Unilever, Dove (a detergent bar, not actually a "soap") is pH neutral but ranks from one to five on EWG's Skin Deep Cosmetics Database for possessing low to high toxicity.

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Irish Spring

Created in 1972 by the Colgate-Palmolive company and best known for its whimsical Irish-themed ads with the cheeky "Manly, yes - but I like it, too!",

Fans say:

"I have used this soap off and on for about 7 - 10 years. It has a nice scent and rinses clean." (mouthshut.com)

"Irish Spring really seems to rinse off a lot easier than those other soaps, and that makes me feel cleaner. I would say, if you have dry skin, this probably isn't for you, my fiance tried using it, but after a couple days he started getting little patches of dry skin. This soap is more for the non sensitive skin type." (mouthshut.com)

"The soap's odor is really great. It combines the clean odor of soap with the sharp, crisp odor of a good aftershave. Now, I don't use aftershave, as I shave with an electric razor and most aftershaves burn like a motherfucker (which is also why I don't use Listerine mouthwash), but I love the smell of it. Irish Spring smells like aftershave, but is as gentle on your skin as soap, so it's really the best of both worlds. The odor is probably what makes Irish Spring one of the more rugged, manly soaps out there today. ... I think Irish Spring is one of the finest mainstream soaps out there to buy..." (goddijn.com)

Critics say: The Irish Spring line of deodorant bar soaps has an EWG score of three to four for low-moderate toxicity.

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Ivory

The floating aspect of the bar was the result of extra air whipped into the batch, not because it was so "pure and mild". It was popular among the less-advantaged because it was one of the cheapest soaps that could be bought. Ivory was found to be more drying than other soaps

because it contained no glycerin. P & G has in recent years switched formulas to retain the glycerin and lose the sinking to create a bar that would last longer in the shower.

Fans say:

"what can I say about ivory it is the first face and body soap I ever used and I have beautiful skin and I still do" (influenster.com)

"The clean scent is the big attraction here, and nothing makes me feel cleaner during a shower than using ivory soap" (influenster.com)

"I did try Ivory Lavender just to see how well it would perform, and I was pleasantly surprised that it didn't leave my face feeling dry. It lathers nicely, either in my hands or on a washcloth, and it rinses clean leaving no soapy residue behind." (Ivory - Lavender scent, voices.yahoo.com)

Critics say: first sold in 1879 and promoted as suitable for babies, Ivory Soap (manufactured by Proctor & Gamble) is ranked by EWG as three out of ten for low-moderate toxicity. The floating aspect of the bar was the result of extra air whipped into the batch, not because it was so "pure and mild". It was popular among the less-advantaged because it was one of the cheapest soaps that could be bought. Ivory was found to be more drying than other soaps because it contained no glycerin. P & G has in recent years switched formulas to retain the glycerin and lose the sinking to create a bar that would last longer in the shower.

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Jergen's

A popular soap manufactured by Kao Corporation; very popular with users but little solid information about it is found online.

Fans say:

"I have enjoyed this product for years because it lathers well, contains no discernible smell leaves no residue, and is affordable." (Walgreens.com)

"Jergens is one of the few products that stands the test of time and is still on the market. ... Customers give Jergens very high ratings for gentle cleansing, softening, moisturizing and non-irritating properties. It works well for sensitive skin, and one customer states that her family uses Jergens soap in place of expensive allergy soap. Another customer says cleansing with Jergens helps control acne.

Of 15 reviews, Jergens received twelve 5-star ratings and three 3-star ratings, with 5-star being the highest rating. Customers who gave it 3 stars still thought it a great product and had no major complaints." (stylestudio360.com)

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Lever 2000

Fans say:

"Love the old scent & I love the way it leaves my skin feel. Good for odor control & good for all members of the family." (drugstore.com)

"This is an excellent soap that does not irritate or dry the skin. It has a pleasant, clean smelling odor and is gentle enough for the face, yet deodorizing enough for the rest of the body. I highly recommend it." (drugstore.com)

"Lever 2000 Perfectly Fresh Scent soap is one of my favorite brands of deodorant bar soap. This product does not strip the oil out of your skin. There are other deodorant soaps, such as Ivory, Coast, and Irish Spring which leave my skin with a white residue and feeling tight after use. Not Lever 2000. It is tough on dirt but gentle on skin. Lever 2000 removes dirt and all that other good stuff without making your skin feel greasy or slimy." (thewhimsicalmusingsofsusan.com)

Critics say: with an EWG score of four to five for moderate toxicity, the biggest concerns with Lever 2000, manufactured by Unilever, are immunotoxic and ecotoxic fragrance and carcinogenic ingredients such as BHT.

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Neutrogena

Fans say:

"I loved this the first time I used it. It felt like it was getting my skin clear. The smell is awful which is an instant downfall for me. The shape is...odd. It's very rectangular and weird. It can also be lumpy sometimes when you buy it. I would recommend this for people with oily skin. My dry skin however, couldn't take it anymore." (acne.org)

" After using this a couple of days my family kept commenting on how soft and hydrated my skin was. I would very much recommend this." (acne.org)

"So all in all, I heartily recomend Neutrogena to those with skin problems, or those with a taste for the unique in toiletries. It's a truly marvelous soap, and a great conversation piece" (goddijn.com)

"This had helped me a great deal during the time that i was suffering from acne. I never did realize that this simple bar of soap is the answer to my prayers. After spending loads of money on products that i thought would work on me, i was surprised, annoyed, & glad that this one really does work." (theiamere.blogspot.ca)

"I saw this strange orange bar of soap in the bathroom and she told me to try it. I loved it! I have sensitive eyes, and just about anything makes them burn or water...but this didn't. It removed the make-up, washed my face, and left it soft and smooth - not dry and tight like regular soap. I was hooked! I know this soap was not not invented for make-up removal, but it works! I use it for face cleansing, also...it's intended use. I highly recommend this product." (viewpoints.com)

Critics say: Owned by Johnson & Johnson, EWG ranks Neutrogena soaps from two to three for low to low-moderate levels of toxicity. Neutrogena's purpose-specific products, such as facial cleansing soap and soap for treating acne are very well regarded.

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Olay

Fans say:

"I have dry skin, and have tried many soap bars but Olay is by far the best one I've used. I have been using this product for the last 6 years, and still like it." (Walmart.com)

"I refuse to use any bar of soap that is not Oil of Olay! Shea Butter is my favorite." (Walmart.com)

"I love this stuff in the winter, it is so great and moisturizing but for the summer i seem to skip over it because combined with sweat or anything it just seems to be too residuie. i love the scent and feel (in the winter) ive been using this for a long long time and will continue to repurchase." (totalbeauty.com)

"I totally love this soap! Olay Quench, Bar Soap is the only bar soap that I ever buy since I found it and tried it. I have been using Olay Quench soap for the last couple of year and swear that there is no better bar soap out there for adding mositure to dry skin. I have a underactive thyroid condition and have very dry skin and have to combat it with lot of lotion and using a very moisturizing soap, especially in the winter time. Olay Quench soap is the perfect product to do just that. I also have very sensitive skin and this soap is very gentle too which is another excellent feature. The soap bars come in packs of 6 and unlike some soap bars out there on the market that easily dissolve, these bars last a long time. I think one of these soap bars with last a month or even a little more. This is with my husband using it too. The feel is smooth and milky and there is no flimy feel after you get out of the shower, just smooth and softy skin. As I said, my husband uses this soap too and loves it. It has a light soft clean scent so men can use it too. If your skin is feeling the need for moisture and want a soap that you can use year round for soft, feel good skin try this quench soap and you will be hooked. " (epinions.com)

Critics say: EWG ranks Olay's line of detergent and soap bars (the Age-Defying bar is a detergent, while the Soothing Cucumber bar is a soap) from four to five for moderate toxicity. Ingredients of concern include high levels of fragrance; and carcinogens such as BHT and talc.

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Pears - now owned by Unilever, Pears, the world's longest-running soap brand, was first manufactured in 1789 in England.

Fans say:

"pears is the first soap that i started using that helped to alleviate my dry hands, which we all have from time to time. if you lean towards the gourmand or floral sort, pears' unique piney fragrance will leave something to be desired." (makeupalley.com)

"Pears is my fave - it works up to a really luxurious lather, it doesn't have an overpowering smell." (viewpoints.com)

"... it is also the best bar soap for oily skin. This soap was used in our home as a child, and I use it in my own house toda" (lifeandluxury.hubpages.com)

Critics say: The original recipe consisted of: rosemary extract, thyme extract, Pears fragrance essence (ingredients non-specified, which is a concern), water, glycerin, glycerol ester of wood rosin, sodium palmitate (indicating it was made from palm oil), and sodium cocoate (coconut oil).

The current recipe bears virtually no resemblance to the original: the scent is now from "perfume" and the bar itself contains sodium rosinate (an industrial by-product); sodium palmate (not the same as sodium palmitate); alcohol; sorbitol; sodium chloride; tetrasodium EDTA; etidronic acid; propylene glycol; polyethylene glycol; sodium laurel sulfate (a

detergent); sodium metabisulfate; BHT; Cl 12490 (for coloring); benzyl benzoate; benzyl salicylate; eugenol; cinnamal; limonene; and linalool.

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Why make your own soap?

Here's an experiment: go to your bathroom right now and pull out an unwrapped bar of soap. Examine the label - not the ingredients, nothing complicated, just the label itself. What word do you not see on it? In the case of many popular brands, the word you don't see is "soap".

"Cleansing bar", "Refreshing bar", "Beauty bar", "Bath bar" "Moisturizing bar", "Complexion bar" - these do not equal "soap" and that's because they're actually "detergents". They perform the same function and it sounds like a case of splitting hairs but there is a real difference: soaps are made with natural ingredients - oils and fats derived from plants and animals - while detergents are made with synthetic ingredients, such as sodium Lauryl sulfate, hence he trade name "syndet", for "synthetic detergent". . For your clothing, soap is healthier for the environment but it does take a toll - it leaves a film that will not come off and, over time, will leave a dull greyish look to your clothing, so it's a case of six of one, half a dozen of the other (save the environment by using natural soap but then you have to buy clothing more often which is not good for the environment) but by reducing the amount of detergents used, you can at least reduce the environmental damage. For your skin, you so do *not* want detergents!

For an example, let's review Avène's Cold Cream Ultra Rich Cleansing Bar as analyzed by the authoritative website, EWG's Skin Deep Cosmetics Database. Avène is a brand sold in pharmacies and often recommended by pharmacists and beauty advisors as being mild and gentle. The name of the product certainly implies that it is mild, healthful, beneficial, even therapeutic, but the ingredients tell a different story.

This is the information reported on the label:

Sodium Cocoyl Isethionate, Stearic Acid, Sodium Laurate, Sodium Stearate, Paraffin, Sodium Myristate, Water (Aqua), Fragrance, PEG 45 Palm Kernel Glycerides, Avene Thermal Spring Water (Avene Aqua), Beeswax (Cera Alba), BHT, C20 40 Pareth 10, Cetyl Alcohol, Cetyl Phosphate, Glyceryl Stearate, Methylparaben, Mineral Oil (Paraffinum Liquidum), Sodium Hydroxide, Titanium Dioxide, Triethanolamine

In order of concern from most to least, the Cosmetics Database reports:

Fragrance - hazard score of 8/10 (high): Ecotoxicology, Allergies/immunotoxicity, Irritation (skin, eyes, or lungs), Miscellaneous, Organ system toxicity (non-reproductive)

BHT - hazard score of 6/10 (high-moderate): Cancer, Developmental/reproductive toxicity, Allergies/immunotoxicity, Irritation (skin, eyes, or lungs), Organ system toxicity (non-reproductive)

Triethanolamine - hazard score of 5/10 (moderate): Allergies/immunotoxicity, Contamination concerns (nitrosamines-in the presence of nitrosating agents), Organ system toxicity (non-reproductive), Use restrictions

Methylparaben - hazard score of 4/10 (low-moderate): Biochemical or cellular level changes, Endocrine disruption, Allergies/immunotoxicity, Use restrictions

Peg-45 Palm Kernel Glycerides - hazard score of 3/10 (low-moderate): Contamination concerns (Ethylene Oxide, 1,4-Dioxane), Organ system toxicity (non-reproductive)

Sodium Hydroxide - hazard score of 3/10 (low-moderate): Irritation (skin, eyes, or lungs), Organ system toxicity (non-reproductive), Use restrictions

The rest of the ingredients are nominally innocuous in and of themselves but cumulatively speaking, who knows? It's even more important when you look at the rising number of environmentally-sensitive people and the rising rate of developmental disorders in children. Just for example, one child in 88 is now born autistic - a staggering increase from just a few decades ago. The cause or causes of autism is not/are not known but there is definitely an environmental component and it's very possible that a buildup of neurotoxins and estrogen mimickers in the child's body, occurring at a time when he or she is at his or her most developmentally vulnerable, could have an impact on the growing brain. It's not just a concern once the child is born, either - many of the chemicals used in commercial products absorb into the skin and build up in body tissues, so they'd be impacting the child even before birth through exposure from the mother.

Another effect of detergents is the damage to your skin. Regardless of the moisturizer that's been added, the harshness is still stripping the oils from your skin - the added moisturizer is just gluing the damage back down. Home made soap can be made as gentle as you need it and because it retains all the glycerin that's been stripped out by commercial manufacturers, it's buffering the detergent action of the soap. Glycerin is a valuable commodity for manufacturers, worth far too much to leave it in the soap and still sell the soap for less than a buck a bar. Your home made soap contains all the glycerin and that acts as a buffer to protect your skin from getting damaged in the first place. The trade-off is that because of the higher fat content and the presence of glycerin, your home-made soap isn't going to have the shelf-life of a bar of commercial synthetic cleaning product or even commercial soap that's been stripped of glycerin but, properly made, home made soap will still last at least a year (exactly how long were you planning to hang onto it anyway?).

Making your own soap removes any doubt and any question about what is going onto your skin and onto your children's skin and also allows you to move with your skin's changing needs through the seasons:

- Your child is sensitive to red colorants (very common)? No problem - use beet powder added late in the process for a pretty pink soap.
- Your child is allergic to that fun chocolate-scented kids' soap she got for Christmas? No worries - bin that one and whip up a batch of your own using real chocolate and, while you're at it, add a peppermint swirl for fun!
- It's winter and your itchy, dry skin is driving you mad? Make your own Aloe or oatmeal soap.
- The smell of your hubbie's shaving cream makes your eyes water and puts a bad taste in your mouth? Men's shaving soap to the rescue (and, while you're at it, make a batch for yourself scented to your own liking!).
- Your teenager is suffering a devastating bout of acne? There's a soap for that!

Another reason to make your own soap is your children's education: soapmaking is art, chemistry, math, fiscal responsibility, and the environment at their finest:

- Ingredients must be artistically selected and precisely weighed: coconut oil should probably be a maximum of 28% of the total amount of oils and balanced off by softer oils - "So if I want to use a total of 50 ounces in oils, how much coconut oil do I need?" "If we add up the weight of all the oils, the water, and the additives, how much will the finished batch weigh if we're going to lose 10% through evaporation?" "We need 10 ounces for full saponification - how much would a five percent lye discount work out to?"
- Timing and temperature control are critical. Concepts such as "saponification" and "thermogenesis" are visually explained and if you want *real* education, a "volcano effect", even from a safe distance, will absolutely hammer the point home about wearing protective gear and following all safety protocols!
- The oils and fats don't have to be from a bottle: save the fat trimmed off chicken, beef, and pork, render them down into tallow, and you can make soap from that. If you use wood to heat or if you have an outdoor fire pit that uses wood, you can extract the lye from the ashes (although the resulting soap will be much softer as it's mostly Potassium Hydroxide, not pure Sodium Hydroxide). You're not adding to landfills and if you play your cards right, you could probably make your soap for next to free!

Your children will get to witness in action what they've been falling asleep listening to the teacher drone on in class about making it that much more likely they'll retain it.

If nothing else, when the Zombie Apocalypse hits, you'll be able to lead the defense smelling great even after all the stores have been looted bare!

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Different methods of making soap:

Roughly, there are five methods of making soap bars:

1. Cold Process - the hands-down most popular method of making soap from scratch, which is covered in here. Cliff Notes version: weigh out all your ingredients, create the lye solution, combine all your base fats into a pot and melt them together, allow both the lye solution and the oil blend to cool, then blend the lye into the fat/oil mixture. You switch to a hand blender - or you can do it manually if you're into that sort of thing - and keep mixing until the mixture thickens up. Add your colorant, additives, and fragrances, and keep mixing until the batter is similar to mayonnaise (the good stuff, not the cheap stuff from the dollar store). Mold up until hardened, turn out and cut into bars if needed, then let them dry out for a few weeks before using because if you don't, the lye that is still active in the bar will give you *such* a nasty wake-up in the morning!
2. Hot Process - also a popular method of making soap from scratch, which is covered in here. The point of the Hot Process really is to get that whole "cure for four to eight weeks" thing out of the way at one shot: instead of pouring out into molds, you slap a lid on the pot and stick it in a very low oven or pour it into a crockpot on High for a couple or few hours depending on the size of the batch, making sure you stir, stir, stir every fifteen minutes (ish). When the soap is fully translucent (called the "gel phase"), mold it up, insulate well, and let it cool down for twenty-four hours, remove from the molds, slice into bars, and really you can use them immediately. You'll still want to let them dry for a week or so, though, otherwise the soap bar will dissolve very quickly in the shower but they are safe to use right from the get-go as the heat process has taken care of all the lye.
3. **Translucent soap** - an extremely dangerous method of making clear, glass-like soap from scratch (what is often mistakenly referred to as "glycerin" soap). It's so dangerous, in fact, that most people prefer to just use melt-and-pour for their clear soap needs. It is definitely not covered in this book. Lye is dangerous enough without adding the risk of combustive explosion to it.
4. **Milled soap** is technically "rebatched", meaning melted down, remolded, and then left to cure again. It's not really soap*making* , as such, but since rebatching is an important skill, it is covered in this book. Technically speaking, "milled" soap is actual soap that has been reworked, not base soaps that have been bought especially for the purpose of reworking (that's Melt-and-Pour). To mill soap:
    - First, grate up about two cups' worth of old or otherwise unsatisfactory soap bars and leavings into a glass or metal bowl.
    - Add just enough moisture (water, coconut milk, goat's milk, oil, herbal-infused water or oil, aloe gel, etc) to the soap to wet it. Not too much or it'll take *forever* for the soap to cure. Set the bowl over hot water held at a strong simmer and continuously stir smoothly and gently with a wooden spoon, adding just enough liquid as required to prevent it from drying out. Don't get energetic about it or you'll cause all kinds of inconvenient and messy lather. Make sure the soap's not

sticking to the bottom or sides of the bowl, either. You'll know it's ready when it's all translucent (it might be blobby looking - that's okay, it'll sort itself out).

- Mix in whatever other ingredients you wanted to use - fragrance oils, essential oils, herbal or mineral additives, etc. Just make sure the fragrance is blended in consistently - the solid additives are up to you, depending if you wanted a swirling pattern or an even appearance.
- Mold up the soap, making sure to knock any air bubbles out.
- Freeze the molds for up to an hour, then remove from the molds and cut into bars, if necessary, before setting them on drying racks for up to three weeks to fully cure. They are perfectly safe to use, but they'll melt away upon exposure to water if you don't give them a good dry-out.

5. **Melt-and-Pour** is not soap"making" at all and is more closely related to Milled soap: virgin base cubes are purchased from a supplier, melted down, and then customized to taste by adding color and fragrance. It's kind of the cake mix version of DIY soap and is very safe, as such it's very popular when working with children. It's not really covered in this book in any detail save for project ideas as the instructions are found on every packet and require little to no technique or specialized knowledge. this is how to use Melt-and-Pour:

    - Melt the base (double boiler or microwave)
    - Add fragrance and additives
    - Mold up and harden
    - Cut (if required) and cure

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Soapmaking FAQ :

Q: I read online/someone told me that home made soap will not cause allergies/will cause bad skin reactions because the ingredients are so pure and natural/unsafe, unlike properly tested commercial products - is this true?

Just to clear up any misunderstandings: not *all* commercial soaps are bad. Many of them, even most of them, maybe, depending how you think - but not all of them. Not *all* home made soaps are good - some of them contain the same dubious ingredients found in commercial products. After all, they're not difficult to buy and from a cost-revenue perspective, it's mighty tempting to add a couple of ounces of a cheap powder in order to get the same effect as half a pound of expensive tropical oil and yet keep charging the same price.

But allergies are allergies - if someone is allergic to dairy, they will react to dairy in the soap, such as Goat's Milk soap. If someone is allergic to mint, they will react to mint in the soap. Where home made soap can help is if someone is allergic to many things, then removing some of the allergens in the environment can reduce the severity of reactions to other things. For example, if someone is in a constant state of reaction because of their fragranced soap, they might be reacting far worse to tomatoes than they normally would, just because their system is so sensitized. Remove the fragrance from the soap and the tomato allergy dies down or might even go away now that the immune system can catch a break and recover.

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Q: Is making soap easy? Is it expensive? Do I need specialty equipment?

The actual *making* part is easy - if you can make a cake, you can pretty much make soap. It's the prep that's the bear: you have to pay extremely close attention to your weights (everything is done by weight and ratio, not by volume).

Cost-wise, well, that depends on you: if you're going to spend $200 - $300 on pure essential oils, then it'll be expensive soap indeed. Conversely, if you limit yourself to what you have on hand for scent and color (or just go without) and make your own lye and fats, it will be the next best thing to free.

No "specialty" equipment is needed - remember, people were making soap during the times of the Babylonions! - but it is *strongly encouraged* that you follow the suggestions in the Safety Procedures section!

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Q: Is it dangerous?

In short? Yes. Very.

You're working with caustic soda, a.k.a lye. "Caustic" means it causes chemical burns - get that on your skin and you are going to *hurt* . Get it in your eyes and you'll be blind. Inhale it, and you'll die. Let your young child dump the pot over herself and she will die if she's lucky and if she's not, face a lifetime of disfiguring scars and multiple plastic surgeries.

Have I scared you?

Good: you'll pay close attention to the section on Safety Procedures , won't you? It's for this reason that we will not be getting into making Transparent soap (often referred to as "glycerin" soap) from scratch - this process is even more dangerous, with the risk of explosive combustion added to the above.

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Q: How long does home made soap last? Does it go bad?

Home made soap, done properly, should last a year at the very least, even if you haven't added a preservative such as wheat germ oil, Rosemary oleresin, or Vitamin E oil. The colors and fragrances do tend to fade, however, if you're using natural substances instead of chemically stabilized and enhanced additives, but the soap itself will still be good.

Make sure you keep it stored in a cool, dark, dry location for best longevity.

A note, though: if you've added fresh herbs or botanicals that are not completely dried out, then they can definitely go moldy - this includes dried flowers embedded within a bar of clear soap. Make sure you've added Vitamin E or another preservative and maybe toss in come citrus oil or tea tree oil to prevent fungus and bacteria.

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Q: How do I add scent and color to a soap?

Generally speaking, you can either stir it directly into the batch just before you're about to pour it into the mold or, if you want to get very technical, remove an amount of oil equal to the fragrance oil out of the oil before you mix it with the lye, heat it to 100 degrees, blend it with the scented oil, and then stir it into the main batch just as it's starting to thicken, when it's at the "thin Trace" stage. Generally speaking, you don't want to use the hand blender - just stir it in thoroughly with a wooden spoon, ladle, what-have-you. Refer to the "Process" section or to one of the recipes for a more thorough explanation.

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Q: I made the soap days ago but it still isn't hard - what happened?

If your soap won't harden, then there's either too much water in the recipe or there's not enough lye or something else is going on. One method that often reclaims a lost batch is to rebatch and re-pour into the molds. If that doesn't work, then there is a failure in the ingredients somewhere, such as using regular tap water instead of distilled. Other than that, review your notes and make sure you used the correct amount of lye and the correct type - some recipes, especially online, unexpectedly use Potassium Hydroxide instead of Sodium Hydroxide, and that will have an impact on the oils and amounts you use. Particularly at the beginning of your new interest, prepare to throw a lot of batches out.

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Q: I used [something] because I wanted my soap to be [some color] but it's gone all horribly wrong and doesn't look right at all! How can I fix it?

Again, review your notes: what kind of colorant did you use and when did you add it to the soap? Make a note of what happened and don't do that again. From a functionality point of view, if the color is all that's wrong, your soap will still work just fine - it just won't look how you'd intended. You *could* melt it down and try to do something with the color but it's generally not worth the hassle and added expense in electricity, time, etc.

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Q: I did not use orange color and I certainly didn't want it, but now my soap has orange spots on it. What is this and how do I get rid of them? Is it because they're three months old - did my soap go bad already?

DOS is short for "Dreaded Orange Spots", a rather dramatic name for, when all is said and done, a minor problem. The soap itself is fine - doesn't look right and probably smells a bit weird, too, but it's still soap and will still do what soap does. Soap is good for a minimum of one year and that's without using a preservative such as Rosemary oleresin or Vitamin E.

The cause, while not exactly known, seems to be related to water and the oil: superfatting more than about five or ten percent (depending); oil that wasn't stored properly and may have been a touch rancid; contaminated water (only use distilled water!); using too much canola, sunflower, or Rice Bran oil; using rust-prone metals; not storing your soap in a cool, dark, dry place; and exposing the soap to humidity all seem to be potential factors.

If the appearance distresses you too much, just scrape them off with a knife - they can be melted down and rebatched for scrubbing soap and the like.

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Q: How do I know how much lye to use?

There is an actual calculation you can do: it requires that you find out the SAP (or "saponification") value of each of the oils you want to use (a Saponification Chart is included in this book); determine which type of lye you're using; then calculate each ingredient out and sum up the results to determine how much lye you'd need for full saponification (which would be a harsh soap) then take five percent off that to get the proper amount to use.

Honestly? There are many, many online calculators that will work out the whole recipe for you, such as this one, which is very user-friendly: http://www.fromnaturewithlove.com/resources/creator.asp . Simply enter the percentages of the oils you wish to use, follow the bouncing ball, and it will calculate all the amounts for you according to the size of the batch you want.

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Q: What is the difference between Hot Process (HP) and Cold Process (CP) soap? Which one is better?

In the soap itself? Nothing, really. Some minor differences in the texture and the way the colors look but that's about it. As for which one is better, neither: from a usage perspective, they're equal. CP uses less by way of time and utilities but HP saves time, which can be important if you're selling them or running low at home. Refer to the "Process " section for more detailed information.

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Q: Will I get rich selling home made soap? Are there laws about soap like those covering cosmetics and food items?

"Rich"? Unlikely, if you're just selling soap alone. If you're getting into gift baskets, such as those sold at spas, maybe some white-labeling or unique soap products (check the "Cool Projects " section!) you might make a nice bit of change. Soap making is not something you pick up a book on Monday and by Friday you've got your little table set up at the local flea market and on Tuesday you're driving a Porsche. A book such as this is only the very start - even the recipes are only a start because *everything* impacts the soap: your altitude, the humidity or dryness of your room and your local climate, the season, barometric air pressure, the oils you're using (because they do vary from batch to batch), how fast or how slow you mix the batter, how evenly you heat the ingredients, *everything* .

That's why you start with basic recipes and keep diligent and complete notes. It's an industry standard that it takes a solid year of experience before you can consistently produce soap of a quality good enough to retail although prior to that, you can certainly distribute to friends and family as part of the marketing aspect of your business plan.

When it comes to laws, you really need to consult your local office - keep in mind that it's not just the federal level you need to be concerned about. You also need to check your regional and your municipal licensing requirements and a host of other things, such as Food and Drug laws, Public Health laws, and any property zoning ordinances. Refer to the "FDA regulations " section for more on this.

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Au Lait
d'Anesse
Concombre
Au Lait
d'Anesse
Violette
Au Lait
d'Anesse
Jasmin
Au Lait
d'Anesse
Au Lait
d'Anesse
Violette
Au Lait
d'Anesse
Jasmin
Au Lait
d'Anesse

General Safety Procedures

WARNING!!!!!! Ensure that you have fully read, understood, and absorbed these Safety Procedures and are full compliant before you try to make soap! Failure to do so can result in injury or death to you or a loved one - Caustic Soda is no joke!

1. Deal with distractions: you must be able to block off your work area from distractions. The last thing you need is a phone ringing or a child or dog racing through just as you start to pour boiling hot caustic liquid or a sibling fight taking your focus off boiling soap.
2. Organize, organize, organize. Make SURE you have everything you need, that it's exactly where you expect it to be if you have to grab without thinking, and that the most important things are within quick and easy reach, especially a source of running water and an emergency kit.
3. CLEARLY identify all your soaping tackle and gear - it MUST NOT be used for anything else, especially not for cooking! **If you have children in the house and are using equipment such as juice jugs, use indelible marker to clearly indicate it is NOT drinkable.**
4. Don't touch fresh-made soap or the lye solution with bare skin - it *will* burn.
5. All vital soap ingredients are measured by **weight** - ounces, grams, kilograms - NOT volume (fluid ounces, millilitres, cups). Non-essential ingredients (scent, color) may be measured by volume. ***Do not confuse the two.***
6. Make *sure* your scale is good quality and properly calibrated - getting the weights wrong can have really bad results - nobody wants a baby soap with free lye still active!
7. Pay attention to your ingredients - make sure they're food-grade or otherwise GRAS (Generally Recognized As Safe, as designated by the US FDA or your country's equivalent).
8. When purchasing supplies, choose reputable suppliers - you don't want a repeat of the disaster where ingredients were contaminated with industrial toxins.
9. ALWAYS test your soap before using it or especially gifting or selling! (ALWAYS) You can do the traditional "zap" test, where you just touch the tip of your tongue to the soap (any "zap", "pinch", etc, means it's still got active lye in it) or if the idea of licking soap doesn't float your boat, you can purchase phenolphthalein - it's pronounced FEEnol-THALeen. Cutting a bar in half (to get to the inside, which will not be as cured as the outside) and putting a drop or two of phenolphthalein will give you a good indication of where the soap is at: clear or a very pale pink is okay, but the darker the pink, the more lye there is in the soap. If it's been weeks and you're still getting dark pink readings, then you either have to bin the batch or maybe try to rebatch it.
10. Use only rubber, silicone, heat-safe plastic, glass, stoneware, or stainless steel - never use tin, zinc, copper, aluminum, or other alloys - contact with lye can result in toxic fumes (well - *more* toxic fumes than is generated anyway).

11. Always use pure, distilled water - never tap water. Chlorine + Lye = Bad news and the impurities in the tap water can tank the whole batch, resulting in a big ol' waste of time and money.

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Safety Procedures: Working with Lye

WARNING!!!!!! Ensure that you have fully read, understood, and absorbed these Safety Procedures and are full compliant before you try to make soap! Failure to do so can result in injury or death to you or a loved one - Caustic Soda is no joke!

1. NEVER try to use drain cleaner or other products containing lye - EVER. First off, you don't know how much lye you're using, which, if you're lucky, would result in a botched batch or, if you're not lucky, pain and injury from soap containing too much lye. Secondly, drain cleaners and the like contain other ingredients that are toxic and dangerous - nothing you want to be putting all over your child's body. And finally, it's *expensive* to buy lye this way!
2. ALWAYS buy ONLY food-grade lye. The reason is simple: food-grade lye is higher quality than the industrial grade lyes used for drain cleaners, etc. Industrial grade lye often contains heavy metal impurities that are not only unsafe for human consumption but can also affect the way the lye reacts. For example, lye intended for use as drain cleaner may very well be contaminated with aluminum, which creates a more explosive reaction. The last thing you need is lye that reacts unpredictably from batch to batch!
3. Use proper protective gear:
    - Safety goggles - *goggles* , not "glasses": they must provide a seal down to your skin all around your eyes.
    - Ventilator mask rated for fumes and particulates.
    - A range hood or other form of excellent ventilation.
    - Corrosion-resistant rubber-soled shoes - work boots or the footwear worn by lab technicians are good. You do not want to be stuck trying to get your fabric-mesh Nikes off while lye is eating away at your feet!
    - Rubber gloves, the longer the better - if you can get the elbow-length ones, that'd be great.
    - Silicone heat-proof, waterproof oven gloves
    - Tight-woven jacket or overalls, the kind worn by lab technicians and mechanics - the fabric is liquid-resistant and provides an extra barrier.
    - Large rubber or plastic wash basin, large enough to hold the container for the lye solution but not so large that it makes it awkward to work (it'll be easier to clean up if the container bursts or overflows).
3. If you cannot use corrosion-resistant work surfaces such as stainless steel or tempered glass, make sure you line your work surface with rubber or silicone matting. Set down layers of newspaper - it's much easier to clean up spills by bunching up newspaper and tossing it in bag than trying to wipe it up.

4. The container you use to mix the lye solution must be solid and heat/corrosion proof. Mixing the lye solution generates a *lot* of heat - if it gets away from you, the lye solution will actually reach a rolling boil, which is 212F or 100C - and few home disasters compare with a cheap plastic jug melting while full of boiling caustic soda water! In addition, it must be proof against thermal cracking - to cool off an overactive lye solution, the container is put in a bath of ice water, so you don't want something that will crack.
5. That being said, also make sure you have room to work in the container - you'll need to be able to stir and move the solution around with having it splash, slop, and spray everywhere.
6. Repeating from above: Use only rubber, silicone, heat-safe plastic, glass, stoneware, or stainless steel - never use tin, zinc, copper, aluminum, or other alloys - contact with lye can result in toxic fumes (well - *more* toxic fumes than is naturally generated anyway). If you're not sure about your container, fill it with water at a full boil and leave it to sit in the sink. If the container changed in *any* way - gets softer, bendier, leaks, cracks, changes color (in the case of plastic), etc, get something else. If it seems good, dump the water back in the kettle or pot and fill the sink halfway with ice and then just enough water to cover. Refill the container with boiling water and then put it in the ice water. Again, there should be no change whatsoever, definitely no cracking or any audible noises such as pinging! If the container you select lacks handles, make sure you have the heat-proof oven gloves handy - the silicone kind that gives a good grip, not the fabric kind that can absorb liquid. That would be bad.
7. When actually mixing the lye:

ALWAYS ADD LYE TO WATER

LYE TO WATER

LYE → WATER

PUT THE LYE INTO THE WATER

That cannot be emphasized enough: Lye goes into the water, and it goes in low and slow. No holding it above the container and pouring it in like you're adding sugar to Kool-Aid. None of that - it can send lye particulates airborne and then it's in your eyes and you're breathing it in and that's not good.

You get a corrosion-proof spoon or ladle, then you slowly sprinkle the lye onto the water from slightly above the surface while stirring with another corrosion-proof spoon in the other hand.

You cannot stir too much. The more you keep the water moving and the more gradually you add the lye, the more control you have over the thermogenic process and you won't have a pitcher of water suddenly exploding to the boil.

NEVER ADD WATER TO LYE

When water is added to a pile of lye powder in the bottom of a container, what happens is the surface of the lye gets soaked. It starts to heat up before the water has a chance to work through the powder underneath, so it ends up forming a hard crust. As the water circulates due to the convection effect (hot water rising from below sending cool, fresh water down), steam builds up under that crust until the whole thing explodes - and now there's fresh dry lye powder hitting steam and water drops, which explains the term "Volcano Effect ".

NEVER breath in the fumes that rise from the lye solution - they'll scour your lungs. The safest option is to have a good ventilator mask. If you can't manage that, then at least cover your mouth and nose, hold your breath while you're working with the lye, and have a range hood, open window, or other form of ventilation going at top speed. Be careful of counter-top fans: you do NOT want to accidentally blow dry lye all over the place!

Combining the lye and fat is the same as lye and water - lye into the fat or oil mixture slow and easy and stir-stir-stir. Don't be in such a rush.

NEVER USE VINEGAR TO NEUTRALIZE LYE ON YOUR SKIN

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Thanks to a popular, extremely violent movie, there is a common belief that to neutralize lye on the skin, one should immediately apply vinegar.

There are a couple of things wrong with this, beginning with the fact that Hollywood is not exactly an authoritative source for reliable first-aid information. This was a movie where a writer took an elementary science lesson and used it to create a cool scene for a movie. Clearly, no experts were consulted.

Second, this works when there is no emergency situation - eg, the lye is sitting on a counter top or in a petrie dish and is not working its way through your actual skin - because once you add moisture to the lye (such as the moisture from your skin) the caustic burn has already started. Adding vinegar will stop the intact lye from reacting but the lye that's already burning away on your skin is going to keep burning and making you sweat more, adding more moisture to the lye the whole time you're running for the vinegar, getting the bottle open, and dousing yourself (assuming you haven't dropped it), which will then add the water in the vinegar (because household vinegar is only 5% acetic acid) to the remaining dry lye and now you have acid poured all over your burning skin.

Seriously: **if lye comes in contact with your skin, stick it under a cold water tap that's opened up on full.** You need to dilute the lye as fast as possible and flush it off your skin. The cold water will ease the pain of the caustic burn and get the temperature of your skin dropped to prevent further damage.

Keep the water running over the area for a *minimum* of twenty minutes - that's twenty full minutes, 1200 seconds, not "a few minutes" or "well, it seems fine now". Also, *running* water - not a bowl of water. You want the lye flushed off your skin and you want the cold water to stop

the cooking process that has started, which isn't going to work well if you're heating the cold water with your body temperature.

Now that I've scared you thoroughly , rest assured that following these precautions makes soapmaking no more dangerous than using a commercial cleaner to clean out your oven. People all over the world are making soap. Right now, the moment you are reading this, all around your country and all around the world, people are creating lye solutions; blending lye into oil; adding fragrance and color and therapeutics; molding; unmolding; cutting; drying; wrapping; unwrapping; and taking their first shower with the new batch of soap.

It's great fun and there really is nothing to compare with the sensation of showering off with *the* perfect soap, exactly how you wanted it to smell and feel, knowing there are no harmful chemicals, and that you did it yourself!

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MAKING SOAP

Ingredients of home made soap:

Unlike the truly frightening names that go into commercial soaps, when you make your own soap, you don't have to use anything you don't recognize. At its most basic, soap contains:

Fat or Oil: Pretty much any natural fat or oil will do the job and each adds a unique quality to the final product, which is why blends are recommended as opposed to single-ingredient recipes. Olive oil, corn oil, safflower oil, vegetable oil, coconut oil, peanut oil, even shortening and lard are just some of the common, household ingredients that can be used to make soap.

If you really want to get down and "crunchy", make your own by trimming off the fat from the meat you cook for dinner and render it down into a solid block of lard (you know that solid white layer you find on the top of your home made beef stew the next day? That's what we're talking about).

Lye : Also known as "caustic soda" and many other names, Lye is either Sodium Hydroxide or Potassium Hydroxide. The word "caustic" tells you it will cause chemical burns if it touches your skin - it is thermogenetic, meaning that when in contact with water, it will cause a heat reaction. It's possible to boil water by just tossing in some lye. For soapmaking purposes, Sodium Hydroxide is much preferred - it's easier to obtain, cheaper, and makes a harder soap.

It's possible to make your own lye by following the instructions here: http://journeytoforever.org/biodiesel_ashlye.html but it won't be Sodium Hydroxide, it'll be Potassium Hydroxide. It's a tedious process and it's difficult to determine the strength of the solution to accurately calculate how much you need for proper saponification , which is why it's better to buy lye crystals and use that instead.

WARNING: Lye is dangerous! Please review and pay close attention to the section on safety ***!***

Distilled Water: any water used in soap making MUST be pure - the contaminants even just from tap water will affect the final product in unexpected ways up to and including entire batch failure where it will refuse to set.

or other liquid: You don't need to strictly use water. Really, any liquid - coffee, tea, juice, beer, milk, coconut milk, etc can be used in places of liquid with a few adjustments to technique (covered in the Cold Process and Hot Process instructions).

Once you've got those three ingredients - fat, lye, and liquid - you've got the makings of soap!

Naturally, you want more than just a block of off-white to yellow stuff that gets you clean. That's where additives come in:

Fragrance : Fragrance can be found in a number of places but the most common is the use of oils, either essential oil or fragrance oil, because they give a more consistent result than using organics such as herbs and spices. Essential oils are natural and, as such, are more volatile and shorter-lived than fragrance oils, which can be a blend of natural and synthetic oils or all synthetic. Whichever you use, ensure it is safe to use for cosmetic purposes.

Fragrance Oils, Essential Oils, what's the difference?

There is a significant difference between Essential oils, which are all natural, and Fragrance Oils, which are usually a blend of natural and synthetic oils.

Essential oils have natural smells - lemon, orange, lemongrass, basil, etc. Fragrance oils might be blended to smell natural (blueberry, pine, cedarwood, etc) but can also be blended to create something entirely different: "Winter Evening", "Midnight Love", or "Chanel No 5".

Fragrance oils intended for uses such as candles and pot pourri are generally ***not*** safe for use in cosmetics and toiletries. Always check the label and ensure it's safe for contact with skin - it will indicate on the label what uses it is suited for, so look for terms such as or similar to "massage" or "cosmetic use" or "personal scent".

As a class, Essential oils are more volatile and unstable, so the scent will fade more quickly. Fragrance oils, having been blended and buffered with synthetic oils, will last longer although after enough time has lapsed, the scent could alter.

Among the Essential oils, some are more unstable and fade more quickly than others, so it's best to try and layer them - layering Lemon with Lemongrass, for example, which has a lemony fragrance but is more stable.

Fragrances should be added last in the process, generally at a medium trace or later. At this point, much of the lye has been taken up by the fat and the temperature of the soap has dropped enough that the scent is not going to be boiled off or chemically altered.

Generally and *very loosely* speaking, start by adding 0.7oz per pound of oils used and move up from there to a maximum of approximately 1oz/lb. Naturally, this all depends on the type of scent (some are more pungent than others) and the soap recipe (some recipes will require a stronger dose of fragrance than others). Never, ever use a hand mixer to blend in the fragrance oils - just stir it in with a wooden or stainless steel spoon. Using a stick blender will cause trace to speed up and you could end up with bits of soap with a very strong scent and other bits with no scent at all or, worst case scenario, you have a giant brick-on-a-stick.

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Adding Color and Scent

Keep very good notes on the fragrances you use: not just what and how much, but the date and time, the recipe, when you added it in the process, any changes or reactions in the recipe, etc. You might even want to go so far as to note the weather - temperature, humidity, and even barometric pressure - as these can all impact your soap.

When using essential oils, you can go with a single scent, which can be rather one-dimensional and seem a little "thin" or you can layer the scents.

Scent falls into different groups: citrus, woody, earthy, fruity, floral, or musky. Generally and, again, *very loosely* speaking, for a feminine scent, you want a citrus for bright notes; a woody, earthy, or musky layer for "bottom"; and a fruit or floral "top note". For a masculine scent, the woody or earthy tone could take top note; a deep floral such as vetiver or bergamot would be the notes; and, traditionally, musk would be the bottom layer. There are many utilities and websites that list which oils are compatible.

When it comes to choosing Essential oils, ethics can be a concern. "Musk" generally comes from the scent glands the Musk Deer, which in many places is near extinction, and other

animals that are killed and the scent glands removed or tormented to produce secretions that are then collected. There are artificial musks available but should be used with caution due to toxicity concerns. Better would be to substitute a musklike plant oil such as labdanum (rockrose shrub).

Don't be shy about exploring other cultures, either; experiment around and develop your own signature scent menu. That's how you stand out from the competition - everybody does a Chocolate-Mint or Vanilla soap but how many do Chocolate with Five-Spice or Vanilla and Cardamom?

Colorant: This is the fun part - you can use a wide range of products to color your soap. Keep in mind that colorants can react unexpectedly to the high PH of the lye solution. If you know the colorant is unstable or you are unsure, best to save it for the hot process instead and add it after the cooking phase.

Pigments are chemically identical to the mined natural varieties but have been lab-created since the 1970s in order to meet FDA requirements for purity, consistency, and stability. Examples are oxides and ultramarines.

This is one case where "natural" is not "better": some natural (mined) iron oxides are contaminated with antimony, arsenic, lead, mercury, and selenium - not stuff you want slathered all over your body. Today, only synthetically prepared iron oxides are approved for use in the United States (Johnson, S.T. & Wordell, C.J. “Homeopathic and herbal medicine: Considerations for formulary evaluation,” Formulary, 32, 1167, Nov. 1997.)

Being inorganic, pigments are stable - they won't change color or do funny things, even with the Cold Process. They're cost-effective, since synthesis is a lot cheaper than extraction. The fly in the ointment is that unless you take extra steps (basically, whipping them into some extra oil), they'll clump up on you.

FD&C Colorants are lab-created synthetic colorants. They're very simple to use and cover any shade you can imagine. There are many concerns about FD&C colors, as they're found in virtually everything we eat that isn't a whole food and because there have been a number of recalls due to safety concerns. Ingesting them may or may not cause problems - but the *small* amount needed to color up a batch of soap is not going to cause any problems from being on your skin for a few brief moments before you rinse it off.

They're pretty inexpensive, wildly concentrated (so you get even better bang for your buck) and they mix in smoothly, without any clumping nonsense. Alas, they're unstable if used in Cold Process recipes: blues can turn to burgundy, purples might come out dark green, and orange can even turn lime green! Used in Melt-and-Pour, the color does tend to bleed.

Micas are technically in the same line as FD&C because while mica is a naturally-mined product, it has been adulterated to achieve the desired result. They don't clump at all but you have to use a whole lot of the stuff to get the desired result. This is how you get the shimmer in your favorite eyeshadow or the "bling" in that fancy lipstick. Use clear (Melt-and-Pour) to get a really good look at the light bouncing off the reflective particles. Cold Process can affect the amount of reflection or mess up the color (since it's FD&C and, hence, unstable in alkaline environments).

Dessicated organic ingredients, such as Turmeric, cocoa powder, and powdered beets give very pretty results but they do tend to fade. Because they (generally) contain no liquid, they have very little impact on the quality of the final product although adding too much of something like

ground cinnamon or black pepper can make the soap a bit scratchy. The final product can also be a bit unexpected, depending when you add the coloring to the dye process - adding a liquid colorant to the water used to make the lye solution can change the color in unexpected ways. Crayons - non-toxic, kid-safe varieties such as Crayola - are unpredictable: some give really great colors and effects while others wash out completely. Because they're wax, they have less impact on the final product than liquid or alcohol based colors.

For more detailed information, see the Colorants section, which is grouped by color for your convenience.

Other additives can be added to meet particular needs, such as colloidal oatmeal to treat itchy, dry skin; aloe vera for soothing inflamed skin; bentonite clay for shaving soap; fine seeds, coffee grinds, or ground apricot kernel for exfoliating; and various herbs and essential oils such as lemon and tea tree oil to treat acne, eczema, and so on. See the section on Beneficial Additives for more information.

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Home made ingredients versus Commercial ingredients

Compare ingredients such as Aloe Vera, Tea Tree Oil, Rosemary, and Lavender - known to be safe for centuries, if not longer, with the substances often found in commercial products. The following is just a *tiny* sample:

BHA (butylated hydroxyanisole) and BHT (butylated hydroxytoluene) - banned from food in many countries that aren't North American, these neurotoxins are dangerous to the immune system, respiratory system, and liver.

Cocamidopropyl - a surfactant and emulsifier; not only can it cause a rash, but it's often contaminated with substances which can combine with other ingredients to form carcinogenic compounds within your body.

Dimethecone - is derived from silicone and is an example of an emollient used to seal down the skin after it's been stressed by the harsh detergent action of soap with the glycerin removed. By sealing down the skin, it impairs the skin's natural function.

DMDM hydantoin diazolidinyl urea, Imidazalidol urea Sodium hydroxymethylglycinate, N-(Hydroxymethyl) glycine, monosodium salt, and quaternium-15 - used as preservatives, these chemicals release formaldehyde, a known carcinogen and the same stuff used to preserve corpses! **Urea** is a carrier, used to help something penetrate deeper into the skin, which is not comforting when seen in conjunction with words one can't pronounce!

Parabens (methylparaben, polyparaben, ethylparaben, etc.) and **pthalates** are preservatives known to be estrogenic, meaning they mimic female hormones. They are known to be detrimental to the development of children: http://children.webmd.com/environmental-exposure-head2toe/personal-care-products and, as such, should be avoided as much as possible. This is difficult because they're in *everything*. Even more worrying is that while all the focus is on parabens in lipstick, there doesn't seem to be as much concern about chemicals in soap that is applied all over the bodies of our children. You can't tell me that applying a substance that mimics female hormone all over the body of my son time after time isn't going to have an effect.

Anything with "**PEG** " followed by a number is a detergent and foaming agent. Why this is necessary in soap is not easy to fathom, particularly since they are often contaminated with dioxane and ethylene oxide, both known to be carcinogens.

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Using Herbs and Botanicals

Herbs add interesting (and possibly therapeutic) qualities to your soap - they can change the color, the appearance, and/or the scent. Not all herbs can be used - "toxic" is "toxic", regardless if you're ingesting it or applying it to your skin while others might not be toxic but could cause rashes and irritations. Make *sure* you know what the qualities of the herb are that you're planning to use and be extra-vigilant if there's a chance your soap could be used by children, seniors, pregnant or nursing women, or those with medical conditions such as allergy. Peanut oil springs to mind: someone with a high-level reaction allergy will react to peanut oil used in soap because the peanut protein is still in there. Make sure you label your soap clearly with the ingredients.

The easiest way to add herbs - always used dried, by the way: fresh herbs contain water and that can lead to moldy or decomposed nastiness - is to put down a layer in the bottom of the mold before you pour in the batter. A little smattering of finely chopped herb will give an intriguing texture while adding more of a roughly-chopped herb will make it more of an exfoliant-type experience.

Another way is to make an infusion from fresh, dried, or a combination of both, herbs and use that as all or part of the water for the lye solution. When you add the lye, it'll probably take on a very unexpected color and odor but not to worry - that typically sorts itself out by the time the soap is fully cured. If you don't want to go to the hassle of making an infusion, toss the herbs into the water just before you add the lye (called a "lye infusion", where the heat from the chemical reaction does the job of simmering over a stove). This can release more of the herb's properties but probably destroys a lot of the benefit, too. Colors obtained using this method do tend to be more stable and long-lasting.

If you don't want to mess with the lye solution, you can make an infused oil: warm the oil and stir in the herbs. Let them steep over very low heat for hours or days, depending what it is and how strong you want it to be. Boosting the potency is simple: strain out the herbs, reheat the oil, mix in more fresh or dried herbs, and carry on. Repeat as desired. Using this technique, it's possible to color the soap, although be aware that because of the chemical reaction with the lye, the color you get is probably not going to be what you expected.

Depending on the technique you use, you can have herbal inclusions that they're all on the top, all on the bottom, or mixed throughout the bar.

- Sprinkling in the bottom of the soap mold or patting down into the surface of the filled mold (or both!) gives a nice little decorative coating.
- Mixing dried herbs in with some warmed oil and adding it as an inclusion along with your fragrances and colorants will suspend it throughout the bar.

- You can cast it in stripes by pouring a little soap, sprinkling some herbs, pouring a little more, sprinkling some more, etc.
- The one that's probably best from an herbal property retention perspective is hand milling - grate up a bar or two, toss with the dried herbs, sprinkle the mixture with herb-infused oil or water, work until you have a clay-like texture, then pack them into molds or just shape by hand.
- If you have a choice between hot and cold process, choose hot process. Adding them right before molding up doesn't damage the herb's properties as much as dumping them into 200-degree water. Mash them in with a potato masher or put on a pair of silicone oven gloves and knead them in by hand.

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Calculating your own recipes

It's totally possible to create a soap out of one type of fat or oil alone, but it's rarely desirable. Castile soap, for example, is made of pure olive oil. It is, indeed, very gentle on the skin - but it has a unpleasant, slimy texture and the soap dissolves faster than you can blink. Drop it in the tub and that's it - it's done: in the few moments it takes you to find it, it's developed a thick, slippery coating and now you're fighting to keep a grip on it. Drop it in the shower without noticing and within minutes, there will be a thick, slick trail running down the middle of the tub for you to slip and injure yourself. You therefore want to blend different types of oils to take advantage of the unique properties of each. Coconut oil, for example, produces a fluffy lather and a hard soap - but it's also extremely drying to the skin. It's easy to see how combining the soft, moisturizing properties of olive oil with the hardness and fluffy lather of coconut oil would produce a very good all-around general Castile-type soap.

Generally and loosely speaking, you want no more than 30% of your recipe to be hard soaps such as coconut, so the recipe would work out to 30% coconut and 70% olive oil.

So far, the variables are 30% coconut, 70% olive oil, and liquid to lye in a ratio of 1.8:1 (you can use a bit more - up to 2:1 - but it would take longer for the lye to cure. Using less - down to 1.4:1 - would make it cure faster but the risk is that the soap would cure *too* fast, with unpredictable results, including crumbling and cracking.

Checking your supplies, you find you have a total of 250gr of oil, 75 gr of which is coconut and 175gr of which is olive oil.

You never really want 100% saponification, both because it would produce an extremely drying soap but also because if you're off on your saponification value, you could end up with lye left in the soap and that would be an unpleasant soap to use, indeed. Generally, you want to have a lye discount of about 5% (up to 10% is okay), so we multiply the values by .95 to get 71.25gr of coconut oil and 166.25gr of olive oil.

Looking it up on the handy saponification (SAP) chart following this section, we find the SAP value for coconut is about .181 and for olive oil, it's about .134

The math then works out to:

(71.25gr X 0.181) + (166.25g X 0.134)

= 12.9gr + 22.28gr

= 35.18 gr of lye needed

If we use a standard liquid ratio of 1.8:1, then we need

35.18 X 1.8 = 63.32gr of distilled water.

So the whole recipe would work out to:

- 175gr olive oil
- 75gr coconut oil
- 63.32gr distilled water or other liquid
- 35.18gr sodium hydroxide.

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Oil Properties Chart

Fats and oils are made up of Fatty Acids, each of which lends a unique property to soap. The following is a brief list of some common FAs and how they affect soap:

- Lauric Acid and Myristic Acid create a hard cleanser with a fluffy lather
- Linoleic Acid and Oleic Acid create a conditioning soap
- Palmitic Acid and Stearic Acid create a hard bar with a stable lather
- Ricinoleic Acid creates a conditioning bar with a fluffy, stable lather

Almond Oil (Sweet) Oleic 64-82 % Linoleic 8-28% Palmitic 6-8% *Iodine 93-106* Superfatting, Moisturizing, Adds nutrients	**Flax/Linseed*** Oleic 14-39% Linoleic 7-19% Palmitic 4-9% Stearic 2-4% Linolenic 35-66% *Iodine: 105-115*	**Palm Oil** Palmitic 43-45% Oleic 38-40% Linoleic 9-11% Stearic 4-5% *Iodine 45-57*
Apricot Kernel Oil* Oleic 58-74% Linoleic 20-34% Palmitic 4-7% *Iodine 92-108* Superfatting, Moisturizing, Adds nutrients	**Grapeseed Oil** Linoleic 58-78% Oleic 12-28% Palmitic 5-11% Stearic 3-6% *Iodine 125-142*	**Palm Kernel Oil** Lauric 47% Oleic 18% Myristic 14% Palmitic 9% *Iodine 37*
Avocado Oil Oleic 36-80% Palmitic 7-32 % Linoleic 6-18% Stearic 1.5%	**Hazelnut*** Oleic 65-85% Linoleic 7-11% Palmitic 4 - 6% Stearic 1-4%	**Peach Kernel*** Oleic 55 - 75% Linoleic 15-35% Palmitic 5-8% *Iodine: 108-118*

Iodine 82-90 Superfatting, Moisturizing, Adds nutrients	*Iodine: 90-103*	
Babassu Oil* Lauric 50% Myristic 20% Palmitic 11% Oleic 10% Stearic 3.5% *Iodine 10-20*	**Hemp Oil** Oleic 12% Linoleic 57% Palmitic 6% Stearic 2% Linolenic 21% *Iodine: 166.5* Superfatting, Moisturizing,	**Rice Bran*** Oleic 32 - 38% Linoleic 32 - 47% Palmitic 13-23% Stearic 2-3% Linolenic 1-3% *Iodine: 105-115*
Canola/Rapeseed Oil Oleic 32% Linoleic 15% Palmitic 1% *Iodine 105-120*	**Jojoba Oil (liquid wax)** Oleic 10-13% *Iodine 80-85* Superfatting, Moisturizing, Attracts moisture to the skin	**Safflower Oil** Linoleic 70-80% Oleic 10-20% Palmitic 6-7% *Iodine 86-119*
Castor Oil Ricinoleic 90% Linoleic 3-4% Oleic 3-4% *Iodine 82-90* Superfatting, Moisturizing, Attracts moisture to the skin	**Kukui Nut Oil** Linoleic 42% Oleic 20% Palmitic 6% *Iodine 155-175* Superfatting, Moisturizing	**Sesame Oil** Linoleic 39-47% Oleic 37-42% Palmitic 8-11% Stearic 4-6% *Iodine 105-115*
Cocoa Butter Oleic 34-36% Stearic 31-35% Palmitic 25-30% Linoleic 3% *Iodine 33-42* Superfatting, Moisturizing	**Lard** Oleic 46% Palmitic 28% Stearic 13% Linoleic 6% Myristic 1% *Iodine 43-45*	**Shea (Karite) Butter** Oleic 40-55% Stearic 35-45% Linoleic 3-8% Palmitic 3-7% *Iodine 55-71* Superfatting, Moisturizing, Adding nutrients
Coconut Oil Lauric 39-54% Myristic 15-23% Palmitic 6-11% Oleic 4-11% Stearic 1-4% Linoleic 1-2% *Iodine -<10*	**Macadamia Nut Oil** Oleic 54-63% Palmitic 7-10% Stearic 2-6% Linoleic 1-3% *Iodine 73-79*	**Soybean Oil** Linoleic 46-53% Oleic 22-27% Palmitic 9-12% Stearic 4-6% *Iodine 124-132*

Corn Oil Linoleic 45-56% Oleic 28-37% Palmitic 12-14% Stearic 2-3% *Iodine 103-130*	**Mango Oil** Oleic 34-56% Stearic 26-57% Palmitic 3-18% Linoleic 1-13% *Iodine 55-65*	**Sunflower Oil** Linoleic 70% Oleic 16% Palmitic 7% Stearic 4% *Iodine 119-138*
Cottonseed Oil Linoleic 52% Oleic 18% Palmitic 13% Stearic 13% *Iodine 80*	**Neem Tree Oil*** Oleic 50% Palmitic 18% Stearic 15% Linoleic 13% *Iodine 84-94*	**Tallow** Oleic 37-43% Palmitic 24-32% Stearic 20-25% Myristic 3-6% Linoleic 2-3% *Iodine 43-45*
Emu Oil Linoleic 14% Myristic 0.4% Oleic 50% Palmitic 21% Stearic 9% *Iodine 75*	**Olive Oil** Oleic 63-81% Palmitic 7-14% Linoleic 5-15% Stearic 3-5% *Iodine 79-95* Attracts moisture to the skin	**Wheat Germ Oil** Linoleic 55-60% Oleic 13-21% Palmitic 13-20% Stearic 2% *Iodine 125-135*

Making it smell purty: When adding scented oil s , it's really a matter of preference. Generally, for most essential oils, you start at 4.4% of the weight of blended fats and oils - so for our 250gr of oil, we'd add 250 x .044 = 11gr of essential oil - and then adjust from there.

For citrus, add more - 5.6% or so - while for really whiffy stuff like mint or cinnamon, you might want to drop it to about 2.5%.

Adding "stuff": Solid additives such as exfoliants, colloidal oatmeal, or bentonite clay don't have much of a rule because it's such a personal preference - just add until it looks about right to you (you'll find out if it was too much or could've used a bit more!).

Making it look good: With color, it's the same - try to avoid liquid dyes, as they will impact the soap recipe and tend to result in a weak, wishy-washy tint. Stick to powders, pastes, or even non-toxic, child-safe wax crayons. Organics can be used to color soap, as well - Turmeric is famous for its intense golden-yellow hue; cinnamon can result in a pretty peachy-pink color; and dark baking chocolate makes a lovely brown. If you go online, you'll find any number of color reports using different substances, many of which contradict each other so it's probably best you experiment and find out what works for you.

Be creative about your color/scent combinations - there is no logical reason a Coffee Mocha bar can't be blue or purple or even orange for that matter. This attitude will help on the days you're staring at your batch in dismay with no idea what on Earth happened to the gentle "lavender mist" color you had envisioned that turned out something more reminiscent of pond scum.

About Allergies: Be aware that even though you are making your own soap, allergies are still allergies. If your loved one is allergic to dairy, then using goat's milk as a base will still produce a reaction.

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Saponification Chart

OIL (oz)	SAP Value NAOH (Sodium Hydroxide)	KOH (Potassium Hydroxide)
Acai Berry Oil	.136	.191
Almond Butter, Sweet	.98	.139
Almond Oil, Sweet	.137	.193
Aloe Vera Butter	.176	.247
Aloe Vera Oil	.135	.191
Andiroba Oil, Refined	.132	.186
Apricot Kernel Butter	.097	.1361
Apricot Kernel Oil	.134	.188
Argan Oil	.134	.188
Avocado Butter	.132	.186
Avocado Oil	.132	.186
Babassu Oil	.176	.248
Baobab Oil	.143	.202
Beef Tallow	.140	.196
Beeswax	.067	.095
Black Cumin Seed Oil	.137	.193
Black Raspberry Seed Oil	.132	.186
Blackcurrant Oil	.134	.188
Borage Oil	.130	.184
Brazil Nut Oil	.138	.195
Buriti Oil	.149	.210
Calendula Oil	.134	.188
Camelina Oil	.132	.1859
Candelilla Wax	.038	.053
Canola Oil	.123	.173
Carnauba Wax	.061	.086
Carrot Oil	.134	.188
Castor Oil	.127	.179
Cherry Kernel Oil	.135	.190
Cocoa Butter	.136	.192
Coconut Cream Oil (Virgin)	.180	.254
Coconut Oil	.178	.252
Coffee Bean Butter	.132	.186
Corn Oil	.135	.190
Cottonseed Oil	.137	.192
Cranberry Seed Oil	.135	.192
Cucumber Seed Oil	.130	.183
Cupuacu Butter, Refined	.136	.191
Deer Tallow	.139	.1946
Emu Oil	.135	.191
Evening Primrose Oil	.130	.184
Flax Seed Oil	.135	.190
Fractionated Coconut Oil	.234	.329

Goat Tallow	.139	.1946
Grape Seed Oil	.134	.188
Grape Seed Oil, (wine varietals)	.130	.183
Grape Seed Oil, Organic	.135	.191
Green Coffee Oil	.137	.193
Hazelnut Oil	.134	.188
Hemp Seed Butter	.132	.186
Hemp Seed Oil	.135	.191
Illipe Butter	.136	.192
Jojoba, Clear	.064	.091
Jojoba, Natural	.065	.091
Jojoba, Organic, Clear	.064	.091
Karanja Oil	.130	.183
Kokum Butter	.134	.188
Kukui Nut Oil	.135	.191
Lanolin Oil	.070	.099
Lard	.138	.1932
Macadamia Nut Butter	.132	.186
Macadamia Nut Oil	.137	.193
Mango Butter	.134	.189
Mango Oil (Olein)	.132	.186
Manketti Oil	.139	.195
Maracuja Oil	.137	.193
Marula Oil	.135	.190
Meadowfoam Oil	.119	.167
Monoi de Tahiti Oil, Unscented	.178	.252
Moringa Oil	.139	.195
Mustard Oil	.122	.172
Neem Oil (use only lead free!)	.134	.188
Niger-Seed Oil	.135	.189
Nutmeg Butter	.117	.165
Olive Butter	.088	.124
Olive Oil	.133	.188
Palm Kernel Oil	.155	.218
Palm Oil	.139	.195
Papaya Oil	.134	.188
Passionfruit Seed Oil	.137	.193
Peach Kernel Oil	.136	.191
Peanut Oil	.135	.190
Pecan Oil	.191	.135
Pequi Oil	.137	.193
Perilla Oil	.135	.191
Pomace Olive Oil	.133	.188
Poppy Seed Oil	.138	.194
Poppyseed Oil	.136	.192
Pumpkin Seed Oil	.134	.189
Rapeseed Oil	.124	.175
Red Raspberry Seed Oil	.132	.186

Rice Bran Oil	.133	.188
Rice Bran Oil, CP	.129	.181
Roasted Coffee Oil	.130	.183
Rosehip Oil	.133	.187
Rosehip Seed Oil, Organic	.133	.187
Safflower Oil High Linoleic	.135	.190
Seabuckthorn Oil	.116	.163
Sesame Oil	.135	.191
Shea Butter	.126	.178
Shea Oil	.128	.181
Shortening, Vegetable	.136	.1904
Soybean Oil	.134	.188
Stearic Acid	.147	.207
Sunflower Oil	.134	.189
Tamanu (Foraha Oil)	.148	.208
Walnut Oil	.136	.192
Watermelon Seed Oil	.135	.190
Wheatgerm Oil	.135	.190
Yangu (Cape Chestnut) Oil	.135	.190

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WARNING!!!!!! Ensure that you have fully read, understood, and absorbed the Safety Procedures section before you try to make soap! Failure to do so can result in injury or death - Caustic Soda is no joke!

REMEMBER: anything used in the soap, *stays* in the soap - do not even *think* about washing and re-using for cooking in between batches! Here is where the dollar store is your friend!

Cold Process Soap-making

Of all the soap making methods starting from scratch, Cold Process is by far the most popular. It's less labor-intensive, uses less electricity, and is a little bit safer.

The downside is you have to wait weeks before you can use your soap and determine if it's a successful recipe or not. Ready? Let's give it a go! Your soap-making toolkit for any process will consist of:

- Notebook and pen for documentation
- Rubber gloves - the longer, the better; elbow-length, if you can get them, and make sure they're not flopping all over the place.
- Long-sleeved working jacket or overall similar to those worn by lab techs or mechanics: you want a tight-woven durable fabric.
- Safety goggles - not glasses, goggles: the kind that completely seal down to the skin.
- Mask rated for fumes and particulates - you *could* use those paper ones but why?
- Rolls of paper towel
- Large bath towel
- Stick blender - pop over to your local thrift shop and pick one up for $5 or less because you won't be using it for food.
- Two calibrated thermometers of the kind used for candy or oil
- Two plastic pitchers, one labelled with CAUTION: LYE (or similar) with a lid (make sure you can pour from it easily and smoothly, with no dribbles and dripping) - ensure it is heat safe (you don't want cheap plastic melting and slumping halfway through making your lye solution!)
- Stirring spoons - silicone, wood, or stainless steel - dollar store, because you're not ever using them for food.
- Stainless steel whisk
- Pyrex or plastic measuring cups - again, you're not using them for anything except soap.
- Large bowls, microwave and freezer safe.
- Small bowls, microwave and freezer safe
- Large rubber or plastic basin, such as used for washing-up
- A set of oven-safe stainless steel pots with tight-fitting lids for melting fats and oils and batches (size depends on the size of the batch, of course)
- Pair of waterproof, heat-proof silicone oven gloves
- A slow cooker would be really great, too, but it's optional
- Minimum half-dozen "pinch" bowls (for holding measured small amounts of ingredients such as oils and dyes)
- Digital scale that does both Imperial and Metric and can be calibrated.

- Soap molds - you'll want at least one 5lb loaf mold, as well as however many small molds for individual soaps. You don't need to invest in fancy specialty soap molds - you can just use a regular bread pan and cut the soap log into bars with a sharp knife. Just make sure you line it with parchment paper or plastic wrap before you use it, otherwise the soap will have to be cut out in chunks.
- Drying racks
- Lye (Sodium Hydroxide) can be bought online or at your local hardware store. Keep it in a well-secured container on the opposite side of the room from any liquid (including and especially water). If you have children and/or pets or if children have ever come to your house for any reason, it's best to keep the lye in a locked cabinet.
- Distilled water (keep it WELL AWAY from the lye - store them each in sealed containers and on opposite sides of the room).
- A ready supply of ice cubes and a sink or large rubber washing tub.

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Process

First, create the lye solution:

Set up: on a perfectly cleared counter, lay out your digital scale, your pitcher, your container of liquid, and your container of lye (do not open it!). Fill the sink halfway with ice cubes, then add just enough cold tap water so the ice cubes are barely floating. Lock the door or otherwise ensure nobody will walk in on you. Shut off the phone (there are times you don't want to be startled at a critical moment - this is one of them). Fill one plastic pitcher with water and keep it handy next to the sink but not in any place where you can accidentally knock it over - if you should get lye on your skin, flush the area with this water while you get the sink unplugged and the cold water tap going to continue flushing it. Set up your notebook and pen where it will be easy for you to take good, copious notes during the process.

Gear up: put on your work jacket or overall, cover your hair (especially if it's dyed - lye fumes can do funny things to hair dye!), put on your goggles, gloves, and mask.

Start up with water: Tare the heat-safe pitcher (set the pitcher on the scale, then hit the "Tare" button - it may be labelled "Zero" or "Reset" or "Set"; basically, you want the scale to read zero with the pitcher on it). Carefully pour in the distilled water until you reach the amount you need for your recipe. Close the container and put it back into storage. Set the pitcher in the empty washing-up basin.

Set a bowl on the scale and tare again. Slowly measure in lye avoiding kicking up any dust or particulates until the scale reads the proper weight.

Set the pitcher with water into the washing-up tub. Slowly sprinkle the lye into the pitcher with the water - keep stirring to prevent it from globbing up on the bottom of the jug.

DO NOT INHALE THE FUMES

DO NOT INHALE ANY LYE DUST

The water in the pitcher will heat rapidly - do not allow it to come to a full boil. If you find it is getting too hot, too fast, stop adding lye and set the pitcher in the sink full of ice water (stir if it's safe to do so) until it calms down a bit before you add any more.

Start up with alternate liquids: Working with alternate liquids such as honey-water, milk, juice, tea, etc, is not the same as working with pure water. The sugars and additives in the alternate liquid can cause the lye to super-react, so you have to take extra precautions. Start with about 1/3 of the substitute liquid in ice-cold liquid form and the other 2/3 in frozen or half-frozen chunks (ice cube trays help here:

- Add the ice-cold liquid 1/3 to your pitcher.
- Place your lye pitcher into the sink. Fill your sink with enough cold water and ice to about 3/4 the level of the milk in the pitcher. If you add too much water, your pitcher will start to float and may tip over. As you add more milk and the lye to the pitcher, you can add a bit more water and ice to the sink if need be.
- SLOWLY add a bit of the lye to the liquid. As it starts to dissolve, it will start to heat up. Stir the solution gently.
- Wait.
- Wait a bit more.
- Wait a bit more until the solution cools back down a bit. You don't want the solution to get much more than about 120 degrees F to avoid the risk of unpleasant smells from burning.
- Add a bit more lye. Stir. Wait.
- Repeat, adding a bit more lye into the solution at a time, but never enough to cause the liquid to heat up too much or too fast. As the liquid starts to heat up, add a bit of the slushy or frozen liquid to the pitcher to help cool it down if it gets too active. (Use the spoon to lower the frozen liquid so you don't splash the lye solution.)

When you're done adding all of the lye, add the remaining slushy or frozen liquid and stir until everything is melted and blended.

Moving on: Once the lye is fully dissolved, put the lid on and set the pitcher somewhere safe and secure from being knocked over, kicked over, or served into a drinking glass.

After half an hour, check the temperature - make sure you set the thermometer into the center of the liquid, not off to the side. Keep checking every ten minutes or so until it is the proper temperature (between 110 and 125, generally speaking; the recipe will specify).

Melt the fats and oils over low heat in a pot large enough to also contain the lye solution and the rest of the recipe you're using. Once they're melted, install a thermometer and set the pot off to the side to cool.

While the lye solution and the oil blend are cooling, prepare the mold(s): if it's a bread pan or similar, line with parchment paper. If it's something more intricate such as individual molds, line with plastic wrap. Molds for soapmaking may not need preparing at all - check on that well in advance.

Measure out your essential oils, fragrance oils, colorants, additives, etc, into individual pinch bowls. Once you have all the oils measured out safely, combine them in one bowl. By measuring each oil into an individual pinch bowl, you don't have to throw anything away if you accidentally oversplash - you just tip some back into the bottle and no harm done.

Blend up: o nce both the lye solution and the oil blend are at the temperature specified in the recipe (anywhere between 110F and 125F), slowly - *slowly!* - pour the lye solution into the oil mixture while using the stick blender. Keep the end of the blender down near the bottom of the pot to prevent any spraying.

Keep the blender going - making sure to get the sides in as well. After a while, the mixture will start to thicken and leave a small, quickly-vanishing trail as the blender moves around. This is the start of "Trace", which is when all the fun stuff happens. Keep going for a minute or two longer, then test the amount of trace by shutting off the blender and lifting it from the solution: if marks are left on the surface, you're there. It should have the consistency of mayonnaise. From this point, you have to move *fast* because if you dilly-dally, you'll end up with a giant pot-shaped bar of soap that you'll have to hack out in pieces.

To add the ingredients, you'll get the best results if you remove a bit of the soap batter into the small bowl, mix in the ingredients, then return the result to the main batch and blend it in with the stick blender. If it's something like oatmeal, however, that needs to stay grainy, stir it in by hand with a spoon. Quickly.

Mold up: The moment everything is blended up, pour the batter out into the prepared mold(s). Drop the mold on the counter a few times to get any air bubbles knocked out. Smooth the surface with a spatula or the back of the spoon, cover with plastic wrap, wrap in a large towel, and set aside to cool for twenty-four hours.

Clean up: The first thing to deal with is everything used for the lye - pitcher, spoon, thermometer, etc. Rinse them well and set aside to dry. Rinse off the rest of the bowls, preferably before the stuff hardens up and makes it all unnecessarily tedious. Generally speaking, this is all that's required - you don't need to wash them because, well, "soap".

Finish up: The next day, check that the soap has hardened enough to release from the mold without damage. You might need to give it another twelve to twenty-four hours. Pop them out of the mold and slice into bars if necessary, then lay them out on drying racks. Put a label or a note on or near the rack so you'll remember when it's time to package them up and start using them because they'll be sitting there for the next four to eight weeks, depending on the recipe, to dry out. You can use them sooner *technically* but you might still get zapped with lye and the soap will pretty much melt on exposure to water.

For the first week, you'll need to turn them over every day. After that, turn them every third day to ensure the bars dry out evenly. Test the soap for lye before packaging and gifting or using.

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Cold Process Soap Recipes

Field Bouquet Castile-type Bar

Ingredients

Olive Oil	21.2 Ounces	40% of total oils
Coconut Oil (76 Degrees)	16 Ounces	30% of total oils
Mango Butter	6.4 Ounces	12% of total oils
Lily-of-the-Valley Essential Oil	1 oz (28.345 gr)	
Honeysuckle Essential Oil	3/4 oz (21.2621 gr)	
Distilled Water	8 oz (226.796 gr)	
Powdered lye	3 oz (85.0486 gr)	

Note: This is not a true "castile" soap, which is made with pure olive oil, as that tends to be very slick and slippery to the feel and dissolves in a blink in the water. Adding coconut oil and mango butter gives the bar a lighter, fluffier lather and improves its durability.

Suggested colorant: Liquid Chlorophyll (just enough for a delicate green tint)

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure distilled water into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Weigh out the essential oils and colorant (if desired) into their own containers, then combine the two fragrance oils.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the main oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in first the colorant (if used), then the scented oil until blended then continue with the stick blender until full Trace.
9. Once full Trace has been reached, pour the batter into a soapmaking mold and let it set for twenty-four hours (or however long to be removed without damage). Remove from mold

and cut into bars. Set bars onto racks to cure for eight weeks, turning once daily for the first week, then every third day.

Calendula-Shea Butter Soap

Ingredients

Rice Bran Oil	21.2 Ounces (598 gr)	40% of total oils
Coconut Oil (76 Degrees)	10.6 Ounces (300.5 gr)	20% of total oils
Mango Butter	7.95 Ounces (225.3 gr)	15% of total oils
Sweet Almond Oil	5.3 Ounces (150.25 gr)	10% of total oils
Shea Butter	5.3 Ounces (150.25 gr)	10% of total oils
Castor Oil	2.65 ounces (75 gr)	5% of total oils
Distilled Water	20 ounces (567 grams)	
Powdered lye	7.15 ounces (202 grams)	
Calendula (English or Pot Marigold) petals	1/2 Ounce (14 grams)	

Directions:

1. Combine 1/2 ounce of calendula petals with rice bran oil in a crock pot or pot set on very low heat. Simmer up to two hours.
2. Measure out the caustic soda powder into a small container.
3. Measure distilled water into a separate, larger container - keep well away from the lye!
4. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

5. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
6. In a stainless steel pot set over very low heat, measure out the oils and Shea Butter, stirring until they are melted and combined. Set a strainer over the pot and strain the calendula oil through it into the pot. Once the oils are combined, fix a thermometer into the oil and set the pot off to the side.
7. Once both lye solution and oil blend are at approximately 110 degrees Fahrenheit, slowly stir the lye into the oil mixture. Using a wand blender or hand-held utensil, continue stirring well until Trace (the mixture is thick enough to hold a line when the implement is dragged through it - it should have the consistency of a thick pudding).
8. Mold up the soap mixture using a 5lb mold. If desired, this is the time to decorate with fresh petals - press to set them firmly into the surface.
9. Set the lid onto the mold and place aside to harden. After twenty-four hours, check the soap to ensure it is hard enough to remove without getting damaged, cut into bars, and set on racks to cure for four weeks, turning once daily for the first week, then every third day.

Coconut-Hemp Shaving Soap Recipe

Ingredients

Olive Oil	23.9 Ounces	35% of total oils
Coconut Oil (76 Degrees)	10.6 Ounces	20% of total oils
Caster Oil	10.6 Ounces	20% of total oils
Hemp Seed Oil	5.3 Ounces	10% of total oils
Mango Butter	4.2 Ounces	8% of total oils
Sweet Almond Oil	3.7 Ounces	7% of total oils
Bentonite Clay	3 Tbsp	
Colloidal Oatmeal	4 Tbsp	
Distilled Water	20 Ounces (567 grams)	
Powdered Lye	7.269 Ounces (206 grams)	

Suggested Colorant: Coffee, for a light brown/tan effect (use brewed coffee in place of water or add instant)

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure distilled water into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Measure out Bentonite Clay and Colloidal Oatmeal into separate containers.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once thoroughly combined, add the clay: mix the clay into a small bit of the soap mixture (3 or 4 tablespoons), then mix the result back into the batch. This prevents the clay from clumping up. Use a stick blender to ensure the clay is mixed through consistently - not too long, though, you don't want the soap mixture thickening up too fast.
9. Add the colloidal oatmeal to the soap mixture and continue blending until Trace is reached (soap mixture has the thickness of mayonnaise).
10. Mold up using a 5lb mold. After twenty-four hours, remove and cut into bars. Set bars on racks to dry for eight weeks (extended drying time is needed to harden the bar for the

purpose of shaving), turning once daily for the first week, then every third day

Gardener's Rosemary-Citrus Bar

Ingredients

Mango Butter	21.2 Ounces	40% of total oils
Coconut Oil (76 Degrees)	16 Ounces	30% of total oils
Olive Oil (Grade A)	6.4 Ounces	12% of total oils
Avocado Oil	5.3 Ounces	10% of total oils
Castor Oil	4.2 Ounces	8% of total oils
Ground Apricot Kernel	8 tsp	
Rosemary Essential Oil	27 grams (0.9524 Ounce)	
Lemon Essential Oil	17 grams (0.59965 Ounce)	
Lime Essential Oil	17 grams (0.59965 Ounce)	
Tea Tree Essential Oil	14 grams (0.4938 Ounce)	
Distilled Water	21 Ounces (595.34 grams)	
Powdered lye	8.318 Ounces (235 grams)	

Suggested colorant: Turmeric (for a lively yellow-gold)

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure distilled water into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Measure out ground Apricot kernels into a container, then set aside.
7. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
8. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
9. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oils until blended, then add the colorant (if used), then the Apricot kernels, stirring manually after each until evenly distributed throughout the mixture. Note: this recipe sets up fast - do not use the stick blender, as you might find yourself with a soap-on-a-rope effect and nobody wants that!

10. Once full Trace has been reached, pour the batter into a 5lb soapmaking mold and let it set for twenty-four hours (or however long to be removed without damage). Remove from mold and cut into bars. Set bars onto racks to cure for eight weeks, turning daily.

Mechanic's Bar

Ingredients

Mango Butter	21.2 Ounces	40% of total oils
Coconut Oil (76 Degrees)	16 Ounces	30% of total oils
Olive Oil (Grade A)	6.4 Ounces	12% of total oils
Avocado Oil	5.3 Ounces	10% of total oils
Castor Oil	4.2 Ounces	8% of total oils
Raspberry Seeds	8 tsp	
Coffee Bean Essential Oil	1 oz (28.3495 grams)	
Tea Tree Essential Oil	0.4938 oz (14 grams)	
Brewed Coffee	21 Ounces (595.34 grams)	
Powdered lye	8.318 Ounces (235 grams)	

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure coffee into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the coffee. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Measure out Raspberry seeds into a container, then set aside.
7. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
8. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
9. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oils until blended, then add the Raspberry seeds and continue stirring manually until the seeds are evenly distributed throughout the mixture. Note: this recipe sets up fast - do not use the stick blender, as you might find yourself with a soap-on-a-rope effect and nobody wants that!
10. Once full Trace has been reached, pour the batter into a 5lb soapmaking mold and let it set for twenty-four hours (or however long to be removed without damage). Remove from mold and cut into bars. Set bars onto racks to cure for eight weeks, turning once daily for the first week, then every third day.

Caribbean Breezes

Ingredients

Olive Oil	18.0683 Ounces	34.09% of total oils
Coconut Oil (76 Degrees)	18.0683 Ounces	34.09% of total oils
Mango Butter	9.636 Ounces	18.18% of total oils
Safflower Oil	7.2289 Ounces	13.64% of total oils
Coconut Essential Oil	1.5 Ounce (42.5227 grams)	
Lime Essential Oil	0.5 Ounce (14.1725 grams)	
Goat's Milk (2/3 frozen slushy, 1/3 ice cold)	21 Ounces (595.34 grams)	
Powdered lye	8.318 Ounces (235 grams)	

Suggested colorant: Red Cabbage - simmer red cabbage leaves in just enough water to cover until the leaves are blanched pale. Top up water as necessary but don't use too much. Replace equal parts of the goat's milk with the cabbage water. Reaction to the lye will cause a blue tint. If desired, use liquid chlorophyll to give it more of a "sea blue" or "sea green" color.

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure goat's milk into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the milk. Use a calibrated thermometer to monitor the temperature and add the semi-frozen milk to cool it down as needed.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oil then the liquid chlorophyll (if using) until blended then continue with the stick blender until full Trace.
9. Once full Trace has been reached, pour the batter into a 5lb soapmaking mold and let it set for twenty-four hours (or however long to be removed without damage). Remove from mold and cut into bars. Set bars onto racks to cure for eight weeks, turning once daily for the first week, then every third day.

Cottage Soap on a Rope

Ingredients

Mango Butter	21.2 Ounces	40% of total oils
Coconut Oil (76 Degrees)	16 Ounces	30% of total oils
Olive Oil (Grade A)	6.4 Ounces	12% of total oils
Avocado Oil	5.3 Ounces	10% of total oils
Castor Oil	4.2 Ounces	8% of total oils
Basil Essential Oil	27 grams (0.9524 Ounce)	
Cedarwood Essential Oil	17 grams (0.59965 Ounce)	
Black Pepper Essential Oil	10 grams (0.35274 Ounce)	
Pine Essential Oil	10 grams (0.35274 Ounce)	
Distilled Water	21 Ounces (595.34 grams)	
Powdered lye	8.318 Ounces (235 grams)	

Suggested Colorant: Beet powder - it looks pink, but it will create a woodsy green color with visible flecks once it reacts with the lye.
Also required: For the rope, use something natural, such as hemp or jute, that will give a good grip and not get slick once wet. Tie in a loop with a large knot.
Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure distilled water into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:
The solution will heat up - do not let it boil!
Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oils until blended and stir until evenly distributed throughout the mixture. Add the Beet powder, stir until blended to your liking (which may not necessarily be evenly throughout). Continue stirring (this recipe sets up fast!).

9. Once full Trace has been reached, fill mold halfway and wait until it is firm enough to hold the rope. Set the rope knot on top keeping well clear of the sides, then heat the soap better (if necessary) and fill the mold the rest of the way. Harden for 24 hours, then remove from molds and place on drying racks for eight weeks, turning frequently.

Minty Swirl Bar

Ingredients

Soybean Oil	27 Ounces	40% of total oils
Coconut Oil	19 Ounces	28% of total oils
Olive Oil	13 Ounces	19% of total oils
Avocado Oil	9 Ounces	13% of total oils
Spearmint Essential Oil	1 oz (28.3495 gr)	
Peppermint Essential Oil	1/2 oz (14.1748 gr)	
Eucalyptus Essential Oil	1/4 oz (7.08738 gr)	
Distilled Water	22.6 oz (640.7 gr)	
Powdered lye	9.6 oz (272.155 gr)	

Suggested Colorant: Crayola Crayons! 1/2 Granny Smith Apple and 1/2 Jungle Green (to start)

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure distilled water into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:
The solution will heat up - do not let it boil!
Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side. Take some of the oil and put into two small pots. Into each, grate one of the crayon colors and keep warm.
6. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
7. Once the lye solution and main oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oils until blended and stir until evenly distributed throughout the mixture.
9. Once full Trace has been reached, fill molds using about 90% of the batter. Divide the remainder in two and blend in the colors. Drizzle one of the colored batters over the white batter in a side-to-side movement, then drag a popsicle stick or similar through to create the swirl pattern. Repeat for the other colour. Harden for 24 hours, then remove from mold and cut into bars. Place the bars on drying racks for eight weeks, turning once a day for the first week, then every third day after that.

Spots-Be-Gone

Ingredients

Hemp Seed Oil	24 Ounces	36% of total oils
Coconut Oil	15 Ounces	22.4% of total oils
Infused Canola Oil	15 Ounces	22.4% of total oils
Olive Oil	8 Ounces	13.4% of total oils
Beeswax	3 Ounces	4.5% of total oils
Stearic Acid	1 Ounce	1.5% of total oils
Bentonite Clay	4 Tbsp	
Tea Tree Oil	1 oz (28.3495 gr)	
Lemon Essential Oil	1/2 oz (14.1748 gr)	
Lavender Essential Oil	1/2 oz (14.1748 gr)	
Witch Hazel	10 oz (283.495 gr)	
Goat's Milk (2/3 frozen slushy, 1/3 ice cold)	13 oz (425.243 gr)	
Powdered lye	9.02 oz (255.7127 gr)	

To make infused oil: To the canola oil, add 2tbsp each powdered: Chamomile, Slippery Elm, Comfrey, Burdock, and Licorice Root. Simmer over very low heat for 2hrs. (Note: It's going to stink!)

Directions:

1. Measure out the caustic soda powder into a small container.
2. Combine cold Goat's milk and Witch Hazel into a larger container - keep away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the milk mixture. Use a calibrated thermometer to monitor the temperature and use the semi-frozen milk to cool it down when necessary.

Safety Reminders:
The solution will heat up - do not let it boil!
Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the essential oils into separate containers, then mix i and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side. Take some of the oil and put into two small pots. Into each, grate one of the crayon colors and keep warm.
6. In separate containers, weigh out each essential oil, then combine into one container.
7. Once the lye solution and main oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oils until blended and stir until

evenly distributed throughout the mixture. Take some of the soap mix and blend it with the clay, then mix evenly into the main mixture.

9. Once full Trace has been reached (it will be *quick*), fill molds. Harden for 24 hours, then remove from mold and cut into bars. Place the bars on drying racks for eight weeks, turning once a day for the first week, then every third day after that.

Peach Melba Luxury Bar

Ingredients

Olive Oil	21.2 Ounces	40% of total oils
Coconut Oil (76 Degrees)	16 Ounces	30% of total oils
Mango Butter	6.4 Ounces	12% of total oils
Peach Essential Oil	1 oz (28.345 gr)	
Raspberry Essential Oil	1/2 oz (14.1748 gr)	
Distilled Water	8 oz (226.796 gr)	
Powdered lye	3 oz (85.0486 gr)	

Suggested colorant: Crayons! 1/2 orange crayon, 1/2 raspberry red (to start - add more if you wish, but not more than a full one of each)

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure distilled water into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side. Take some of the oil and put into two small pots. Into each, grate one of the crayon colors and keep warm.
6. Weigh out the essential oils and colorant (if desired) into their own containers, then combine the two fragrance oils.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the main oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in first the colorant (if used), then the scented oil until blended then continue with the stick blender until full Trace.
9. Once full Trace has been reached, fill molds using about 90% of the batter. Divide the remainder in two and blend in the colors. Drizzle one of the colored batters over the white batter in a side-to-side movement, then drag a popsicle stick or similar through to create a swirl pattern. Repeat for the other colour. Harden for 24 hours, then remove from mold and cut into bars. Place the bars on drying racks for eight weeks, turning once a day for the first week, then every third day after that.

Animal Fats in Soap

Why Animal Fat?

There are a lot of myths surrounding the use of animal fat in soap but they're more a product of today's politically correct environment than having any actual base in reality. Animal fatted soaps are not vastly different from vegetable fatted soaps. They're not going to clog up the pores, cause skin irritations and rashes, or anything else like that - on the contrary, saponified tallow has a near-perfect fatty acid profile to benefit your skin. There are many urban legends about animal fatted soaps causing all manner of rashes and ills but they were the result of contaminants or artificial additives used in the recipe, not the soap itself. Had the tallow been replaced with olive oil at the time, we'd be hearing about how horrible olive oil soap is for the skin.

There are some concerns about the impact of pesticides, antibiotics, and hormones fed to cattle but as yet, they appear to be more thought exercises, as there doesn't seem to be any actual studies confirming that hormones and antibiotics can survive the rendering and saponification processes nor has there been any discovery of pesticides in lard or beef shortening making the news.

One of the biggest benefits of using tallow is the cost: if you were to save all the fat cut off the meat you prepare for your everyday meals, keeping it separated in the freezer, you would accumulate enough fat that you could render it down and use it to make soap - that means not having to buy any oils or fats. Of course, the result would be an extremely hard bar with a smooth but scant lather so you'd still want to add a bit of softer oils such as olive oil and shea butter.

Basically, any animal-sourced fat can be used to make soap - including bacon fat!

How to Render

In order to use it as soap, the fat must be as clean and pure as you can get it. To do this, remove as much meat as possible and put all the trimmings into a pot. Add just enough water to cover the trimmings and bring to a boil. Drop the heat and simmer, adding water as needed to keep it just floating. After the fat has melted and is all floating on top of the water, remove the pot from the heat and allow to cool to room temperature, then put in the fridge, freezer, cold room, (or back porch in cold weather!) until very cold.

Remove the disk of fat from the top and discard the (gross and stinky) water. Put the fat back into the cleaned pot and add more water, bring to a boil, and repeat the process a number of times until the water comes out clean and clear. You'll be left with a disk of pure white fat to make soap!

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Animal Fat Cold Process Recipes

Almond-Rice Bran Bar

Ingredients

Lard	23 Ounces (652 gr)	72% of total oils
Coconut Oil	3 Ounces (85 gr)	9% of total oils
Olive Oil	6 Ounces (170 gr)	19% of total oils
Sweet Almond Oil	1 Ounces (28.5 gr)	
Lavandula Essential Oil	0.4 Ounces (11 gr)	
Rice Bran Powder		
Lard (for superfatting)	1.6 Ounces (45.5	
Buttermilk (1/3 ice cold, 2/3 semi-frozen)	11.5 Ounces (326 grams)	
Powdered lye	4.5 ounces (127.6 grams)	

Directions:

1. Measure out the caustic soda powder into a small container and goat's milk into a separate, larger container - keep well away from the lye!
2. Create the lye solution by slowly mixing the lye, bit by bit, into the goat's milk. Use a calibrated thermometer to monitor the temperature and add the slushie milk to cool it down as necessary.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

3. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
4. In a stainless steel pot set over very low heat, measure out the oils and Shea Butter, stirring until they are melted and combined. Set a strainer over the pot and strain the calendula oil through it into the pot. Once the oils are combined, fix a thermometer into the oil and set the pot off to the side.
5. Once both lye solution and oil blend are at approximately 110 degree Fahrenheit, slowly stir the lye into the oil mixture. Using a wand blender or hand-held utensil, continue stirring well until Trace (the mixture is thick enough to hold a line when the implement is dragged through it - it should have the consistency of a thick pudding). Stir in fragrances, then stir in Rice Bran Powder until it looks good.
6. Mold up the soap mixture using a 5lb mold. If desired, this is the time to decorate by pressing sliced almonds and rice bran firmly into the surface.
7. Set the lid onto the mold and place aside to harden. After twenty-four hours, check the soap to ensure it is hard enough to remove without getting damaged, cut into bars, and set

on racks to cure for four weeks, turning once daily for the first week, then every third day.

Smoothest Shaving Soap

Ingredients

Beef Tallow	31.2 Ounces	65% of total oils
Olive Oil (76 Degrees)	9.6 Ounces	20% of total oils
Hemp Seed Oil	4.8 Ounces	10% of total oils
Shea Butter	2.4 Ounces	5% of total oils
Shea Butter (melted)	2.4 Ounces	
Bentonite Clay	3 Tbsp	
Colloidal Oatmeal	3 Tbsp	
Men's Fragrance Oil	2.1 Ounces	
Distilled Water	17.2 Ounces (567 grams)	
Powdered Lye	6.6 Ounces (206 grams)	

Suggested Colorant: Coffee, for a light brown/tan effect (use brewed coffee in place of water or add instant)

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure liquid into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the liquid. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Measure out Bentonite Clay and Colloidal Oatmeal into separate containers.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once thoroughly combined, add the clay: mix the clay into a small bit of the soap mixture (3 or 4 tablespoons), then mix the result back into the batch. This prevents the clay from clumping up. Use a stick blender to ensure the clay is mixed through consistently - not too long, though, you don't want the soap mixture thickening up too fast.
9. Add the colloidal oatmeal, fragrance oil, and melted shea butter to the soap mixture and continue blending until Trace is reached (soap mixture has the thickness of mayonnaise).
10. Mold up using a 5lb mold. After twenty-four hours, remove and cut into bars. Set bars on racks to dry for eight weeks (extended drying time is needed to harden the bar for the

purpose of shaving), turning once daily for the first week, then every third day

Cherry-Almond Blossom

Ingredients

Lard	33.6 Ounces (952.6 gr)	70% of total oils
Avocado Oil	4.8 Ounces (136 gr)	10% of total oils
Shea Butter	9.6 Ounces (272 gr)	20% of total oils
Avocado Oil	2.4 Ounces (68 gr)	
Black Cherry Fragrance Oil	1.4 Ounces (39.7 gr)	
Almond Fragrance Oil	0.7 Ounces (19.8 gr)	
Goat's Milk (2/3 frozen slushy, 1/3 ice cold)	17.2 Ounces (487.6 gr)	
Lye	6.5 Ounces (184.3 gr)	

Suggested colorant: Red and White swirls (D&C Red, Titanium Dioxide)

Directions:

1. Measure out the caustic soda powder into a small container and cold goat's milk into a larger container - keep it well away from the lye!
2. Create the lye solution by slowly mixing the lye, bit by bit, into the cold milk. Use a calibrated thermometer to monitor the temperature and use the semi-frozen milk to cool it down when necessary until all the milk is used.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

3. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
4. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
5. In separate pinch bowls, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
6. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
7. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the Avocado oil and scented oils until blended, then add the colorant (if used: for swirl effect, split the batch into two and color each, layer into mold, then swirl together), stirring manually after each until evenly distributed throughout the mixture.
8. Once full Trace has been reached, pour the batter into a 5lb soapmaking mold and let it set for twenty-four hours (or however long to be removed without damage). Remove from mold and cut into bars. Set bars onto racks to cure for eight weeks, turning once daily for the first week, then every three days after that.

Do You Like Pina Coladas ?

Ingredients

Lard	24 Ounces (680.4 gr)	50% of total oils
Coconut Oil	12 Ounces (340.2 gr)	25% of total oils
Olive Oil (Grade A)	12 Ounces (340.2 gr)	25% of total oils
Coconut Oil (melted)	2.4 Ounces (68.04 gr)	
Pineapple Fragrance Oil	1.4 Ounces (40 gr)	
Coconut Cream Fragrance Oil	0.7 Ounces (20 gr)	
Coconut Milk (2/3 frozen slushy, 1/3 ice cold)	17.2 Ounces (487.6 grams)	
Powdered lye	7.0 Ounces (198.5 grams)	

Directions:

1. Measure out the caustic soda powder into a small container and cold milk into a larger container - keep it well away from the lye!
2. Create the lye solution by slowly mixing the lye, bit by bit, into the cold milk. Use a calibrated thermometer to monitor the temperature and use the semi-frozen milk to cool it down when necessary until all the milk is used..

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

3. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
4. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
5. In separate containers, weigh out each fragrance oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
6. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
7. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oils and extra coconut oil until blended . Continue blending until full Trace.
8. Once full Trace has been reached, pour the batter into a 5lb soapmaking mold and let it set for twenty-four hours (or however long to be removed without damage). Remove from mold and cut into bars. Set bars onto racks to cure for eight weeks, turning once daily for the first week, then every third day.

English Meadows

Ingredients

Beef Tallow	24 Ounces (680.4 gr)	50% of total oils
Mango Butter	12 Ounces (340.2 gr)	25% of total oils
Peach Kernel Oil	12 Ounces (340.2 gr)	25% of total oils
Mango Butter	2.4 oz (68.04 gr)	
Lavender Essential Oil	0.7 Ounces (20 gr)	
Rose Geranium Essential Oil	0.7 Ounces (20 gr)	
Camomile Essential Oil	0.7 Ounces (20 gr)	
Distilled Water	17.2 Ounces (487.6 grams)	
Powdered lye	6.6 Ounces (206 grams)	

Suggested colorant: Liquid Chlorophyll (just enough for a delicate green tint)

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure distilled water into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Weigh out the essential oils and colorant (if desired) into their own containers, then combine the two fragrance oils.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the main oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in first the colorant (if used), then the scented oil until blended then continue with the stick blender until full Trace.
9. Once full Trace has been reached, pour the batter into a soapmaking mold and let it set for twenty-four hours (or however long to be removed without damage). Remove from mold and cut into bars. Set bars onto racks to cure for eight weeks, turning once daily for the first week, then every third day.

Romantic Nights

Ingredients

Beef Tallow	24 Ounces (680.4 gr)	50% of total oils
Almond Oil	14.4 Ounces (408.2 gr)	30% of total oils
Olive Oil	9.6 Ounces (272 gr)	20% of total oils
Almond Oil	2.4 oz (68.04 gr)	
Rose Essential Oil	0.7 Ounces (20 gr)	
Sandalwood Essential Oil	0.7 Ounces (20 gr)	
Lavender Essential Oil	0.7 Ounces (20 gr)	
Rosewater	17.2 Ounces (487.6 grams)	
Powdered lye	6.6 Ounces (206 grams)	

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure rosewater into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the rosewater.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oil until blended then continue with the stick blender until full Trace.
9. Once full Trace has been reached, pour the batter into a 5lb soapmaking mold and let it set for twenty-four hours (or however long to be removed without damage). Remove from mold and cut into bars. Set bars onto racks to cure for eight weeks, turning once daily for the first week, then every third day.

Manly Wake-up

Ingredients

Beef Tallow	26.4 Ounces (748.4 gr)	55% of total oils
Olive Oil (76 Degrees)	7.2 Ounces (204 gr)	15% of total oils
Hemp Seed Oil	9.6 Ounces (272 gr)	20% of total oils
Shea Butter	4.8 Ounces (136 gr)	10% of total oils
Hemp Seed Oil	2.4 Ounces (68 gr)	
Lime Essential Oil	0.9 Ounce (25.5 gr)	
Mint Essential Oil	0.7 Ounces (20 gr)	
Geranium Essential Oil	0.5 Ounce (14 gr)	
Distilled Water	17.2 Ounces (487.6 grams)	
Powdered lye	6.6 Ounces (206 grams)	

Suggested Colorant: Powdered Beet - but add it to the water at the beginning.

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure distilled water into a separate, larger container - keep well away from the lye!
3. First mix the powdered beet into the water, then create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:
The solution will heat up - do not let it boil!
Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oils until blended and stir until evenly distributed throughout the mixture.
9. Once full Trace has been reached, pour the batter into a 5lb soapmaking mold and let it set for twenty-four hours (or however long to be removed without damage). Remove from mold and cut into bars. Set bars onto racks to cure for eight weeks, turning once daily for the first week, then every third day.

Chocolate Bacon Slabs

Ingredients

Rendered Bacon Fat	28.8 Ounces (814.5 gr)	60% of total oils
Coconut Oil	12 Ounces (340.2 gr)	25% of total oils
Cocoa Butter	7.2 Ounces (204.1 gr)	15% of total oils
Cocoa Butter	2.4 oz (68.04 gr)	
Distilled Water	17.2 Ounces (487.6 grams)	
Powdered lye	6.5 Ounces (184.2 gr)	

Suggested Colorant: Red and Brown Powdered food dye, Titanium White

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure distilled water into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:
The solution will heat up - do not let it boil!
Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side. Take some of the oil and put into two small pots.
6. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
7. Once the lye solution and main oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture. Blend until full Trace, then divide the batter into two, putting half in one bowl and half in the other.
8. Color one half with red and brown food dye to achieve a "bacony" color. Color the other with titanium white.
9. Layer the two colors alternately in a loaf mold making sure the layers are not smooth and flat - you want a wavy, ripply appearance when the loaf is sliced into bars, emulating the irregular stripes of sliced bacon. Harden for 24 hours, then remove from mold and cut into bars. Place the bars on drying racks for eight weeks, turning once a day for the first week, then every third day after that.

Rainbow Soap Bar

Ingredients

Lard	24 Ounces (680.4 gr)	50% of total oils
Olive Oil	16.8 Ounces (476.2 gr)	35% of total oils
Mango Butter	7.2 Ounces (204 gr)	15% of total oils
Mango Butter	2.4 oz (68.04 gr)	
Mandarin Essential Oil	1 oz (28.3495 gr)	
Lemon Essential Oil	1/2 oz (14.1748 gr)	
Grapefruit Essential Oil	1/2 oz (14.1748 gr)	
Goat's Milk (2/3 frozen slushy, 1/3 ice cold)	17.2 Ounces (487.6 gr)	
Lye	6.5 Ounces (184.3 gr)	

Colorant: 1 each Crayola crayons, one for each color of the rainbow, finely-grated into its own pinch bowl (keep extra in case you need more intensity)

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure cold Goat's milk into a larger container - keep away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the milk mixture. Use a calibrated thermometer to monitor the temperature and use the semi-frozen milk to cool it down when necessary.

Safety Reminders:
The solution will heat up - do not let it boil!
Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the essential oils into separate containers, then mix i and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side. Melt the extra mango butter and mix in with finely grated crayons to desired intensity, keeping them all warm and melted (an oven is useful for this part).
6. In separate pinch bowls, weigh out each essential oil, then combine into one bowl.
7. Once the lye solution and main oil blend are at around 115 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the scented oils until blended and stir until evenly distributed throughout the mixture. Keep blending until full Trace, then quickly weigh the batch and divide by seven into individual bowls and color with one of the crayon mixtures.
9. Fill mold by layering the colors in the order of the rainbow: Red, Orange, Yellow, Green, Blue, Indigo, Purple. Harden for 24 hours, then remove from mold and cut into bars. Place the bars on drying racks for eight weeks, turning once a day for the first week, then every third day after that.

10. Note: for fun, jury-rig a curved mold to make rainbow-shaped bars!

Goat's Milk Baby Soap

Ingredients

Beef Tallow	24 Ounces (680.4 gr)	50% of total oils
Coconut Oil	16.8 Ounces (476.2 gr)	35% of total oils
Shea Butter	7.2 Ounces (204 gr)	15% of total oils
Shea Butter	2.4 oz (68.04 gr)	
Lavender Essential Oil	0.7 Ounces (20 gr)	
Chamomile Essential Oil	0.7 Ounces (20 gr)	
Ylang-Ylang Fragrance Oil	0.7 Ounces (20 gr)	
Goat's Milk (2/3 frozen slushy, 1/3 ice cold)	17.2 Ounces (487.6 gr)	
Lye	6.5 Ounces (184.3 gr)	

Directions:

1. Measure out the caustic soda powder into a small container.
2. Measure cold Goat's milk into a larger container - keep away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the milk mixture. Use a calibrated thermometer to monitor the temperature and use the semi-frozen milk to cool it down when necessary.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side. Melt extra Shea Butter in a separate container.
6. Weigh out the essential oils into their own pinch bowls, then combine the oils into one bowl.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the main oil mixture.
8. Once you reach a light Trace state (a quickly-vanishing mark is left when you drag the utensil through the mixture), manually stir in the essential oils until blended then continue with the stick blender until full Trace.
9. Once full Trace has been reached, fill molds. Harden for 24 hours, then remove from mold and cut into bars. Place the bars on drying racks for eight weeks, turning once a day for the first week, then every third day after that.

WARNING!!!!!! Ensure that you have fully read, understood, and absorbed the Safety Procedures section before you try to make soap! Failure to do so can result in injury or death - Caustic Soda is no joke!

REMEMBER: anything used in the soap, *stays* in the soap - do not even *think* about washing and re-using for cooking in between batches! Here is where the dollar store is your friend!

Hot Process Soap-making

While Cold Process is less labor-intensive, uses less electricity, and is a bit safer, Hot Process soaps are good to go immediately, although it's advised to let the soap harden for about a week.

The beginning is exactly the same as Cold Process but, for the sake of convenience, that part of the process is reiterated here rather than having you go flipping back and forth in the book. Again, assemble your soap-making toolkit, which consists of:

- Notebook and pen for documentation
- Rubber gloves - the longer, the better; elbow-length, if you can get them, and make sure they're not flopping all over the place.
- Long-sleeved working jacket or overall similar to those worn by lab techs or mechanics: you want a tight-woven durable fabric.
- Safety goggles - not glasses, goggles: the kind that completely seal down to the skin.
- Mask rated for fumes and particulates - you *could* use those paper ones but why?
- Rolls of paper towel
- Large bath towel
- Stick blender - pop over to your local thrift shop and pick one up for $5 or less because you won't be using it for food.
- Two calibrated thermometers of the kind used for candy or oil
- Two plastic pitchers, one labelled with CAUTION: LYE (or similar) with a lid (make sure you can pour from it easily and smoothly, with no dribbles and dripping) - ensure it is heat safe (you don't want cheap plastic melting and slumping halfway through making your lye solution!)
- Stirring spoons - silicone, wood, or stainless steel - dollar store, because you're not ever using them for food.
- Stainless steel whisk
- Pyrex or plastic measuring cups - again, you're not using them for anything except soap.
- Large bowls, microwave and freezer safe.
- Small bowls, microwave and freezer safe
- Large rubber or plastic basin, such as used for washing-up
- A set of oven-safe stainless steel pots with tight-fitting lids for melting fats and oils and batches (size depends on the size of the batch, of course)
- Pair of waterproof, heat-proof silicone oven gloves
- A slow cooker would be really great, too, but it's optional
- Minimum half-dozen "pinch" bowls (for holding measured small amounts of ingredients such as oils and dyes)
- Digital scale that does both Imperial and Metric and can be calibrated.

- Soap molds - you'll want at least one 5lb loaf mold, as well as however many small molds for individual soaps. You don't need to invest in fancy specialty soap molds - you can just use a regular bread pan and cut the soap log into bars with a sharp knife. Just make sure you line it with parchment paper or plastic wrap before you use it, otherwise the soap will have to be cut out in chunks.
- Drying racks
- Lye (Sodium Hydroxide) can be bought online or at your local hardware store. Keep it in a well-secured container on the opposite side of the room from any liquid (including and especially water). If you have children and/or pets or if children have ever come to your house for any reason, it's best to keep the lye in a locked cabinet.
- Distilled water (keep it WELL AWAY from the lye - store them each in sealed containers and on opposite sides of the room).
- A ready supply of ice cubes and a sink or large rubber washing tub.

Process

Set up: on a perfectly cleared counter, lay out your digital scale, your pitcher, your container of liquid, and your container of lye (do not open it!). Fill the sink halfway with ice cubes, then add just enough cold tap water so the ice cubes are barely floating. Lock the door or otherwise ensure nobody will walk in on you. Shut off the phone (there are times you don't want to be startled at a critical moment - this is one of them). Fill one plastic pitcher with water and keep it handy next to the sink but not in any place where you can accidentally knock it over - if you should get lye on your skin, flush the area with this water while you get the sink unplugged and the cold water tap going to continue flushing it. Set up your notebook and pen where it will be easy for you to take good, copious notes during the process.

Gear up: put on your work jacket or overall, cover your hair (especially if it's dyed - lye fumes can do funny things to hair dye!), put on your goggles, gloves, and mask.

Start up: Tare the heat-safe pitcher (set the pitcher on the scale, then hit the "Tare" button - it may be labelled "Zero" or "Reset" or "Set"; basically, you want the scale to read zero with the pitcher on it). Carefully pour in the liquid until you reach the amount you need for your recipe. Close the container and put it back into storage. Set the pitcher in the empty washing-up basin.

Set a bowl on the scale and tare again. Slowly measure in lye avoiding kicking up any dust or particulates until the scale reads the proper weight.

Slowly sprinkle the lye into the pitcher with the liquid - keep stirring to prevent it from globbing up on the bottom of the jug.

DO NOT INHALE THE FUMES

DO NOT INHALE ANY LYE DUST

The liquid in the pitcher will heat rapidly - do not allow it to come to a full boil. If you find it is getting too hot, too fast, stop adding lye and set the pitcher in the sink full of ice water (stir if it's safe to do so) until it calms down a bit before you add any more.

Start up with alternate liquids: Working with alternate liquids such as honey-water, milk, juice, tea, etc, is not the same as working with pure water. The sugars and additives in the alternate liquid can cause the lye to super-react, so you have to take extra precautions. Start

with about 1/3 of the substitute liquid in ice-cold liquid form and the other 2/3 in frozen or half-frozen chunks (ice cube trays help here):

- Add the ice-cold liquid 1/3 to your pitcher.
- Place your lye pitcher into the sink. Fill your sink with enough cold water and ice to about 3/4 the level of the milk in the pitcher. If you add too much water, your pitcher will start to float and may tip over. As you add more milk and the lye to the pitcher, you can add a bit more water and ice to the sink if need be.
- SLOWLY add a bit of the lye to the liquid. As it starts to dissolve, it will start to heat up. Stir the solution gently.
- Wait.
- Wait a bit more.
- Wait a bit more until the solution cools back down a bit. You don't want the solution to get much more than about 120 degrees F to avoid the risk of unpleasant smells from burning.
- Add a bit more lye. Stir. Wait.
- Repeat, adding a bit more lye into the solution at a time, but never enough to cause the liquid to heat up too much or too fast. As the liquid starts to heat up, add a bit of the slushy or frozen liquid to the pitcher to help cool it down if it gets too active. (Use the spoon to lower the frozen liquid so you don't splash the lye solution.)

When you're done adding all of the lye, add any remaining slushy or frozen liquid and stir until everything is melted and blended.

Moving on: Once the lye is fully dissolved, put the lid on and set the pitcher somewhere safe and secure from being knocked over, kicked over, or served into a drinking glass.

After half an hour, check the temperature - make sure you set the thermometer into the center of the liquid, not off to the side. Keep checking every ten minutes or so until it is the proper temperature (between 110 and 125, generally speaking; the recipe will specify).

Melt the fats and oils over low heat in a pot large enough to contain the lye solution and the rest of the recipe you're using with lots of room left over. Once they're melted, install a thermometer and set the pot off to the side to cool.

While the lye solution and the oil blend are cooling, prepare the mold(s): if it's a bread pan or similar, line with parchment paper. If it's something more intricate such as individual molds, line with plastic wrap. Molds for soapmaking may not need preparing at all - check on that well in advance.

Measure out your essential oils, fragrance oils, colorants, additives, etc, into individual pinch bowls. Once you have all the oils measured out safely, combine them in one bowl. By measuring each oil into an individual pinch bowl, you don't have to throw anything away if you accidentally oversplash - you just tip some back into the bottle and no harm done.

Blend up: once both the lye solution and the oil blend are at the temperature specified in the recipe (anywhere between 110F and 125F), slowly - *slowly!* - pour the lye solution into the oil mixture while using the stick blender. Keep the end of the blender down near the bottom of the pot to prevent any spraying.

Keep the blender going - making sure to get the sides in as well. After a while, the mixture will start to thicken and leave a small, quickly-vanishing trail as the blender moves around. This is the start of "Trace", which is when all the fun stuff happens. Keep going for a minute or two

longer, then test the amount of trace by shutting off the blender and lifting it from the solution: if marks are left on the surface, you're there. It should have the consistency of thick mayonnaise.

Now we diverge to Hot Process:

Put the lid on the pot and leave it to cook on low heat for a while. You'll notice bubbles starting to pop around the edge of the lid - monitor closely so you can gently stir it down if it gets too active. You don't want this stuff bubbling over!

After a while, the mixture will begin to turn clear, looking like melted wax. Once it's all completely clear, test it - it should feel waxy if you rub it between your fingers and there should be no "bite" if you touch it with your tongue (kinda feels like licking a battery if there's still active lye in it). If you get bitten, keep cooking until the bite is gone.

This is the point at which you add the colorant, fragrance, and whatnot. First, let the soap batter cool down - too hot and your essential oils will dissipate in a flash. Make sure all your additives are warm - cold additives will brick up your soap. Second, move *fast* . Prep as much in advance as possible because the cooler the soap gets, the harder it is to stir.

- Anything organic, such as herbs and extracts, just stir them in easy .
- Powders should be mixed with a bit of glycerin or warm oil, which will prevent it from clumping up when you add it to the batch.
- Add essential oils only after the soap has cooled down a bit because they're volatile - too high a heat and they completely evaporate. It helps to check on the flash point of the oil, which is the point at which the oil goes "poof!" and wait until the soap is below that.

Mold up:

Unlike CP soap, HP doesn't pour nicely - it blobs and globs. As such, you'll have to sort of pack it down into the molds and smooth it out best as you can. Still tap it on the counter, though, but not too hard, as it's still hot enough to burn you if it slops or pops. Let it cool for twenty-four to forty-eight hours. Once it's hard enough, remove from the mold and tear off any liner, then cut into bars. If it won't unmold, freeze the soap for 15min or so and that should release it. Store in a cool, dry, dark place.

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Hot Process Soap Recipes

Spiced Apple

Ingredients

Canola Oil	28 Ounces (793.75 gr)	41.2% of total oils
Olive Oil	25 Ounces (708.75 gr)	36.8% of total oils
Mango Butter	15 Ounces (425.25)	22% of total oils
Pie spice blend to your liking	2 Tbsp	
Turmeric	2 Tbsp	
Apple Fragrance Oil	3 Tbsp	
Distilled Water	22.6 ounces (640.7 gr)	
Powdered lye	9.4 ounces (202 grams)	

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure out the caustic soda powder into a small container.
3. Measure distilled water into a separate, larger container - keep well away from the lye!
4. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

5. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
6. In a stainless steel oven-proof pot with a tight-fitting lid set over very low heat, measure out the oils, stirring until they are melted and combined. Once the oils are combined, fix a thermometer into the oil and set the pot off to the side.
7. Once both lye solution and oil blend are at approximately 110 degree Fahrenheit, slowly stir the lye into the oil mixture.
8. Once you reach a thick Trace state (consistency of thick mayonnaise), cover with the lid and set in the oven for two hours or until saponification is complete, stirring thoroughly every 10 - 15 minutes, before adding fragrance and spices and then molding.
9. Allow to harden for 24 to 48 hours and then cut into bars. Soap should be good for immediate use but allow a week or so to let it dry out before labeling and packaging or it'll dissolve mighty quickly

Chocolate Macaroon Bar

Ingredients

Olive Oil	23.9 Ounces (677.5 gr)	35% of total oils
Coconut Oil (76 Degrees)	10.6 Ounces (300.5 gr)	20% of total oils
Castor Oil	10.6 Ounces (300.5 gr)	20% of total oils
Hemp Seed Oil	5.3 Ounces (150.25 gr)	10% of total oils
Mango Butter	4.2 Ounces (119 gr)	8% of total oils
Sweet Almond Oil	3.7 Ounces (104.9 gr)	7% of total oils
Bentonite Clay	3 Tbsp	
Colloidal Oatmeal	4 Tbsp	
Coconut Fragrance Oil	2 Tbsp	
Cocoa Fragrance Oil	1 Tbsp	
Distilled Water	20 Ounces (567 gr)	
Powdered Lye	7.269 Ounces (206 grams)	

Suggested Colorant: Baker's Chocolate - 1 oz dark, grated

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure out the caustic soda powder into a small container. Measure distilled water into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:
The solution will heat up - do not let it boil!
Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees F.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Measure out Bentonite Clay and Colloidal Oatmeal into separate containers.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture. Remove some and mix in the chocolate
8. Once thoroughly combined, add the clay: mix the clay into a small bit of the soap mixture (3 or 4 tablespoons), then mix the result back into the batch. This prevents the clay from clumping up. Use a stick blender to ensure the clay is mixed through consistently - not too long, though, you don't want the soap mixture thickening up too fast. Repeat with oatmeal, then blend until a thick Trace (consistency of thick mayonnaise).
9. Cover with the lid and set in the oven for two hours or until saponification is complete, stirring thoroughly every 10 - 15 minutes, before adding fragrance and chocolate and then molding. Allow to harden for 24 to 48 hours and then cut into bars. Soap should be

good for immediate use but allow a week or so to let it dry out before labeling and packaging or it'll dissolve mighty quickly

Morning Citrus Bar

Ingredients

Mango Butter	21.2 Ounces (601 gr)	40% of total oils
Coconut Oil (76 Degrees)	20.2 Ounces (572.6 gr)	38% of total oils
Olive Oil (Grade A)	6.4 Ounces (181.4 gr)	12% of total oils
Avocado Oil	5.3 Ounces (150.25 gr)	10% of total oils
Lemon Zest, finely grated and dried	10 tsp	
Lemon Essential Oil	27 grams (0.9524 Ounce)	
Orange Essential Oil	17 grams (0.59965 Ounce)	
Lime Essential Oil	17 grams (0.59965 Ounce)	
Geranium Essential Oil	14 grams (0.4938 Ounce)	
Distilled Water	21 Ounces (595.34 grams)	
Powdered lye	8.318 Ounces (235 grams)	

Suggested colorant: Turmeric (for a lively yellow-gold)

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure distilled water and lye into separate containers - keep well away from each other!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Measure out Lemon zest into a container, then set aside.
7. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
8. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
9. Once you reach a thick Trace state (consistency of thick mayonnaise), cover with the lid and set in the oven for two hours or until saponification is complete, stirring thoroughly every 10 - 15 minutes, before adding fragrance, zest, and scent and then molding. Allow

to harden for 24 to 48 hours and then cut into bars. Soap should be good for immediate use but allow a week or so to let it dry out before labeling and packaging or it'll dissolve mighty quickly

MelonPear Bar

Ingredients

Olive Oil	27 Ounces (765.4 gr)	40% of total oils
Coconut Oil	19 Ounces (538.6 gr)	28% of total oils
Soybean Oil	13 Ounces (368.5 gr)	19% of total oils
Avocado Oil	9 Ounces (255.1 gr)	13% of total oils
Pear Fragrance Oil	28.3495 grams (1 Ounce)	
Honeydew Melon Fragrance Oil	14 grams (0.4938 Ounce)	
Goat's Milk (1/3 ice cold, 2/3 semi-frozen)	22.6 oz (595.34 gr)	
Powdered lye	9.6 oz (235 gr)	

Suggested Colorant: 1 Granny Smith Crayola crayon, grated

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure out the caustic soda powder into a small container and goat's milk into a separate, larger container - keep well away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the goat's milk. Use a calibrated thermometer to monitor the temperature and add the slushie milk to cool it down as necessary.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a thick Trace state (consistency of thick mayonnaise), cover with the lid and set in the oven for two hours or until saponification is complete, stirring thoroughly every 10 - 15 minutes, before adding fragrance, scent, and finely-grated crayons and then molding. Allow to harden for 24 to 48 hours and then cut into bars. Soap should be good for immediate use but allow a week or so to let it dry out before labeling and packaging or it'll dissolve mighty quickly

Meditation Soap

Ingredients

Olive Oil	21.2 Ounces (601 gr)	40% of total oils
Coconut Oil (76 Degrees)	16 Ounces (453.6 gr)	30% of total oils
Mango Butter	6.4 Ounces (181.4 gr)	12% of total oils
Sandalwood Essential Oil	1 oz (28.345 gr)	
Patchouli Essential Oil	1/2 oz (14.1748 gr)	
Black Pepper	1/4 oz (14.1748 gr)	
Distilled Water	8 oz (226.796 gr)	
Powdered lye	3 oz (85.0486 gr)	

Suggested colorant: Liquid Chlorophyll (just enough for a delicate green tint); alternatively, you can use dye for a soft lilac or orchid purple

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure out the caustic soda powder into a small container and water into a larger container - keep away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Weigh out the essential oils and colorant (if desired) into their own containers, then combine the two fragrance oils.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the main oil mixture.
8. Once you reach a thick Trace state (consistency of thick mayonnaise), cover with the lid and set in the oven for two hours or until saponification is complete, stirring thoroughly every 10 - 15 minutes, before adding fragrance and scent and then molding. Allow to harden for 24 to 48 hours and then cut into bars. Soap should be good for immediate use but allow a week or so to let it dry out before labeling and packaging or it'll dissolve mighty quickly

My Sister Paula

Ingredients

Lard	16 Ounces (453.6 gr)	32% of total oils
Coconut Oil (76 Degrees)	16 Ounces (453.6 gr)	32% of total oils
Olive Oil	16 Ounces (453.6 gr)	32% of total oils
Castor Oil	2 Ounces (57 gr)	4% of total oils
Pumpkin Purée	3 oz (85 gr)	
Pumpkin Pie Spice	3 oz (85 gr)	
Pumpkin Spice Fragrance Oil	2Tbsp	
Titanium Dioxide		
Copper Sparkle Mica		
Goat's Milk (2/3 frozen slushy, 1/3 ice cold)	15 oz (425.243 gr)	
Powdered lye	7.4 oz (209.786 gr)	

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure out the caustic soda powder into a small container and cold milk into a larger container - keep away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the cold milk. Use a calibrated thermometer to monitor the temperature and add the semi-frozen milk as needed until it's all used.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees F.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Weigh/measure out the essential oil and colorants into their own containers.
7. Once the lye solution and oil blend are at around 125 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the main oil mixture.
8. Once you reach a thick Trace state (consistency of thick mayonnaise), cover pot with lid and set in the oven for two hours, stirring thoroughly every 10 - 15 minutes. Once saponification is complete (completely translucent and no "zap"), blend in the pumpkin purée. Split the soap mixture into two containers: 1/3 in one, 2/3 in the other. To the lesser amount, stir in 1 Tbsp titanium dioxide by mixing first with a bit of glycerin. To the second, add 1 Tbsp of Copper Sparkle (or similar mica product) mixed with glycerin and blend well. When the copper color is even, blend in the spices to the dark batch and the scented oil to the light.
9. Press down into molds in layers of each color starting with the dark color - aim for a minimum of two layers each - then swirl around to form the pattern.
10. Allow to harden for 24 to 48 hours and then cut into bars. Soap should be good for immediate use but allow a week or so to let it dry out before labeling and packaging or

it'll dissolve mighty quickly.

Afternoon Tea in the Garden

Ingredients

Mango Butter	21.2 Ounces (598 gr)	40% of total oils
Coconut Oil (76 Degrees)	16 Ounces (453.6 gr)	30% of total oils
Olive Oil (Grade A)	10.6 Ounces (300.5 gr)	12% of total oils
Avocado Oil	5.3 Ounces (150.25 gr)	10% of total oils
Rose Essential Oil	1 oz (28 gr)	
Jasmine Oil	1/2 oz (14 gr)	
Lily-of-the-Valley Oil	1/2 oz (14 gr)	
Black Pepper Oil	1/4 oz (7 gr)	
Distilled Water	17.7 Ounces (501.7866 gr)	
Powdered lye	7.6 Ounces (215.456 gr)	

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure out the caustic soda powder into a small container and water into a larger container - keep away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Weigh out the essential oils into their own containers, then combine the fragrance oils into one container.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the main oil mixture.
8. Once you reach a thick Trace state (consistency of thick mayonnaise), cover with the lid and set in the oven for two hours or until saponification is complete, stirring thoroughly every 10 - 15 minutes, before adding fragrance and scent and then molding. Allow to harden for 24 to 48 hours and then cut into bars. Soap should be good for immediate use but allow a week or so to let it dry out before labeling and packaging or it'll dissolve mighty quickly

Cherry Vanilla

Ingredients

Soybean Oil	27 Ounces (765.4 gr)	40% of total oils
Coconut Oil	19 Ounces (538.6 gr)	28% of total oils
Olive Oil	13 Ounces (268.5 gr)	19% of total oils
Avocado Oil	9 Ounces (255.1 gr)	13% of total oils
Black Cherry Essential Oil	1 oz (28.3495 gr)	
Vanilla Essential Oil	1/2 oz (14.1748 gr)	
Tuberose Essential Oil	1/4 oz (7.08738 gr)	
Distilled Water	22.6 oz (640.7 gr)	
Powdered lye	9.6 oz (272.155 gr)	

Suggested Colorant: Crayola Crayons! 1-1/2 Dark Red, finely grated

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure out the caustic soda powder into a small container and water into a larger container - keep away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the distilled water. Use a calibrated thermometer to monitor the temperature.

Safety Reminders:
The solution will heat up - do not let it boil!
Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. In separate containers, weigh out each essential oil, then combine into one container. Measuring into separate containers means if you oversplash an oil, you can remove some back into its own bottle and no harm done.
7. Once the lye solution and main oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a thick Trace state (consistency of thick mayonnaise), cover with the lid and set in the oven for two hours or until saponification is complete, stirring thoroughly every 10 - 15 minutes until completely translucent. Add fragrance and mix in well, then stir in 1/3 of the finely-grated crayons until well blended, then stir in the rest just until evenly distributed throughout the mixture (you want the gratings just to soften and smear, leaving small streaks of darker color throughout the tinted soap). Mash into molds and allow to harden for 24 to 48 hours before cutting into bars. Soap should be good for immediate use but allow a week or so to let it dry out before labeling and packaging or it'll dissolve mighty quickly.

Facial Bar

Ingredients

Hemp Seed Oil	24 Ounces (680.3 gr)	36% of total oils
Coconut Oil	15 Ounces (425.2 gr)	22.4% of total oils
Infused Canola Oil	15 Ounces (425.2 gr)	22.4% of total oils
Olive Oil	8 Ounces (226.7 gr)	13.4% of total oils
Beeswax	3 Ounces (85 gr)	4.5% of total oils
Stearic Acid	1 Ounce (28 gr)	1.5% of total oils
Colloidal Oatmeal	4 Tbsp	
Almond Essential Oil	1 oz (28.3495 gr)	
Rose Geranium Essential Oil	1/2 oz (14.1748 gr)	
Comfrey Essential Oil	1/2 oz (14.1748 gr)	
Goat's Milk (2/3 frozen slushy, 1/3 ice cold)	23 oz (425.243 gr)	
Powdered lye	9.02 oz (255.7127 gr)	

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure out the caustic soda powder into a small container and goat's milk into a larger container - keep away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the cold milk. Use a calibrated thermometer to monitor the temperature and use the semi-frozen milk to cool it down when necessary until all the milk is used.

Safety Reminders:
The solution will heat up - do not let it boil!
Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the essential oils into separate containers, then mix i and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. In separate pinch bowls, weigh out each essential oil, then combine into one container.
7. Once the lye solution and main oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the oil mixture.
8. Once you reach a thick Trace state (consistency of thick mayonnaise), cover with the lid and set in the oven for two hours or until saponification is complete, stirring thoroughly every 10 - 15 minutes, before adding fragrance and additives and then molding. Allow to harden for 24 to 48 hours and then cut into bars. Soap should be good for immediate use but allow a week or so to let it dry out before labeling and packaging or it'll dissolve mighty quickly

Men's Luxury Bar

Ingredients

Olive Oil	22 Ounces (623.7 gr)	41.5% of total oils
Coconut Oil (76 Degrees)	15 Ounces (425.25)	28.3% of total oils
Mango Butter	8 Ounces (226.8 gr)	15.1% of total oils
Shea Butter	8 Ounces (226.8 gr)	15.1% of total oils
Lime Essential Oil	1 oz (28.345 gr)	
Ylang-Ylang Essential Oil	1/2 oz (14 gr)	
Vetiver Essential Oil	1/2 oz (14 gr)	
Sandalwood Essential Oil	1/4 oz (7 gr)	
White Musk Essential Oil	1/8 oz (4 gr)	
Guinness Beer, frozen into cubes	8 oz (226.796 gr)	
Powdered lye	3 oz (85.0486 gr)	

Directions:

1. Preheat oven to its lowest setting (about 170 degr F).
2. Measure out the caustic soda powder into a small container and put some of the beer cubes into a larger container - keep away from the lye!
3. Create the lye solution by slowly mixing the lye, bit by bit, into the beer cubes. Use a calibrated thermometer to monitor the temperature and add more cubes to control the rising temperature and prevent boilover or a volcano effect.

Safety Reminders:

The solution will heat up - do not let it boil!

Keep area well-ventilated to avoid inhaling toxic fumes!

4. Set the solution aside in a safe, well-ventilated area and allow it to cool to 110 degrees Fahrenheit.
5. In a stainless steel pot set over very low heat, measure out the oils and stir until they are melted and combined. Fix a thermometer into the oil and set the pot off to the side.
6. Weigh out the essential oils into their own containers, then combine the two fragrance oils.
7. Once the lye solution and oil blend are at around 110 degrees Fahrenheit (put container in a sink filled with either hot or ice water to adjust temperature as needed), slowly stir the lye solution into the main oil mixture.
8. Once you reach a thick Trace state (consistency of thick mayonnaise), cover with the lid and set in the oven for two hours or until saponification is complete, stirring thoroughly every 10 - 15 minutes, before adding fragrance and scent and then molding. Allow to harden for 24 to 48 hours and then cut into bars. Soap should be good for immediate use but allow a week or so to let it dry out before labeling and packaging or it'll dissolve mighty quickly.

Should I sell my soap ?

Sooner or later, everybody who's gotten bitten by the soap bug is left standing there looking at more soap than any human could possibly use in a lifetime and wondering what, exactly, can be done about it all? Gifting is always an option, as is donating to homeless shelters and drop-ins and the like, but what about selling it?

The general convention in the home soap community is that it takes a solid year of soapmaking experience before you can even begin to think about selling your soap. You need this year to learn the basic technique and how it needs to be adapted for your environment and your circumstances; accumulate the tools, equipment, and supplies you need; develop your own recipe book; and develop a personal style. You'll also be getting the word out about your soap by giving away samples to friends and relatives to try out and get back to you with feedback.

To start a soap business: you need information, capital, premises, and product.

Information: you need education - at the very least, take a Small Business Management course, a Marketing course, an Accounting course, and a commercial tax preparation course. Not only will you learn the ins and outs of starting and running your own business thus maximizing your odds of success and minimizing the damage from learning on the job, but this is the kind of thing that impresses bankers and other potential investors. While investigating courses you can take, don't limit yourself to brick-and-mortar schools, either - there are reputable courses you can take online. Be careful that the course you choose is attached to a reputable educational institution and is accredited by the government. The last thing you want to do is waste money on a certificate that is not recognized and waste your time learning a bunch of stuff that may or may not even be accurate.

Capital: there's no way around it - you need money. You need enough money not only to get your business off the ground (supplies, payroll, advertising, licenses, business fees, etc) but to support it (and yourself!) until sales pick up. Save, scrounge, beg, and borrow from friends, family, and personal savings - no bank, business development corporation, or other investor is going to provide 100% financing and you wouldn't want that anyway because it essentially means they own your entire business. Anyone that promises to, you're probably better off running away from really quickly.

Talk to your bank about business services they provide - you'll probably need a business startup loan and a line of credit. You might possibly need a mortgage, if you're thinking to buy a separate work/retail location. A vehicle loan to buy a van needed for deliveries and picking up supplies might be required. Try to avoid lending companies if you can, as the interest rates tend to be much higher, although if your personal credit is not good, you may have no alternative. If you only need a small cash infusion, check around your community for a microlender or a venture capitalist, people who are willing to lend out small amounts (which in loan terms is generally three thousand dollars or less).

Contact your local business development corporation: they often have the inside track on business startup programs and government loans and grants for which you might qualify.

Premises: it's not simply a matter of kitting out your laundry room or garage - the first thing you have to do is check your local zoning laws to make sure you can even run a home business of any kind from your residential property. If you rent, you'll need to square it with the landlord, too. You need to look into what the Building Code requirements are (particularly with respect to fire suppression and chemical activity) and what is required by Public Health. If you

anticipate needing employees either right away or later on down the road, you will need to look into labor laws and relevant statutes regarding bathroom capacity and washing facilities (some industries require full change rooms with showers be made available for employees, others don't).

Product: contact your local public health department to determine what laws and procedures will apply to your product, particularly with respect to labeling and to ingredients. In some areas, you might be required to have random samples of your product formally assessed for content and safety. How will you handle potential allergens such as peanut and nut oil: full labeling and disclosure? Totally separate manufacturing facilities? Avoid using them completely?

Special requirements are something else you might want to take into account: if you anticipate a heavily jewish or muslim community, for example, you'll want to consult the local rabbi or imam about what will be required to make your soap suitable for sale to the pious. Ivory, Camay, Safe Guard, Coast, and Zest are all haram (not allowed) because they are made with lard. Some rabbis do not consider soap to fall under the tenets of kosher because soap is inedible however other rabbis feel that anything - edible or otherwise - made from an unkosher animal is not to be used. There is an increasing trend toward vegetarianism and veganism - soap made with goat's milk would be vegetarian but not vegan. Does your market research indicate that catering to these markets would be profitable?

If you intend to cater to such specialty markets, be aware you will need completely separate sets of tools and equipment - you cannot create kosher or vegan soap using tools and equipment that was used to create lard-based soap. This will obviously require additional capital investment or market niche specialisation.

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The Business Plan

Those who fail to plan, plan to fail: If you think you might be serious about selling your soap products, the first thing you need to do is a business plan.

A business plan takes a *lot* of time and work but it's very worth it - far better to spend two or three months developing a business plan and doing market research to discover the business wouldn't fly than jump into the business blindly and find out it's a no-goer two years later when you're in the hole and your house is on the line!

Get yourself a pad of paper or open up a new document on the computer and get set to answer the following questions:

Step 1 : What is your business going to be?

- What are you going to sell?
- Where will you sell it?
- WHY are you selling it?
- How will you grow your business?

Step 2 : Who will your customer be?

- Who will your customer be?
- What sets your product apart from the other products available?
- How will your product uniquely benefit your customers?

Step 3: Market Analysis

- What are the results of your market survey?
- Who will your customers be?
- How many of them are there?
- Of the total, how many buy products similar to yours?
- How many do you realistically expect will want your product instead?
- How will you get your product to them?
- What are the most effective ways to promote your product to your target customers?
- What times of year will be busy?
- What times of year will be slow?
- What other avenues are available to market your product?

Step 4 : Competition Analysis

- Who are your direct competitors?
- Who are your indirect competitors?
- What are their strengths?
- What are their weaknesses?
- How will you be better than they are?

Step 5: Organizational Structure

- Who are the key members of your proposed business?
- What experience do they have running a business (include up to date résumés)?
- What experience do they have with making and selling home made soap?
- How will they be compensated (salary, commission, wages, etc)?

Step 6: Work force

- How will you manage tasks that cannot be done by existing members of the business: will you hire employees, contract temporary labor, or outsource?
- How much do you anticipate spending for payroll and applicable taxes and fees?
- How much do you anticipate spending for outsourced work?

Step 7: Property and equipment

- What kind of property will you need to manufacture your soap?
- What kind of property do you currently operate out of?
- Will you be selling online only or will you have a brick-and-mortar retail outlet?
- What kind of equipment do you already have (manufacturing, office, marketing, etc)?

- What kind of equipment do you need?
- How much do you expect to need in order to expand business operations?

Step 8: The Money Stuff

- This is where you put down *everything* money: how much you anticipate in revenue; how much you expect to spend on the cost of doing business; how you'll repay loans and credit; what you anticipate will be the increase in revenue; how much profit you expect to make

Step 9: Legal Structure

- What kind of business structure will you have: sole proprietor, partnership, limited partnership, corporation, etc?
- What legal contracts and obligations do you currently have?
- What are the tax laws relevant to your business?
- What are the zoning laws, commercial restrictions, employment standards, and health and safety ordinances that apply in your area?
- What permits and licenses will you be required to obtain and maintain?
- Are there any organizations such as trade guilds or certifying agencies you must join in order to operate?
- Are there legal or contractual limitations on your business operations (ie, if you've bought into a franchise, you might be legally obligated to limit purchases to approved suppliers)?

Step 10: The Executive Summary

- The executive summary is the last to be written and is the Cliff Notes version of all of the above
- Make sure you specify whether you're creating a new business, buying a business, or expanding a business.

Obviously, this is a rather superficial treatment of the subject but it gives you an idea of the detail that is required. By the time you're done your business plan, your business will be very real inside your head - it's just a matter of bringing it to life. Your business plan is the core of your business: it is constantly growing and changing to reflect your business. You will be presenting it to bankers and other financiers, to shareholders, and even to suppliers who might be inclined to offer you a line of credit. If you go online or ask your banking institution, business development corporation, or chamber of commerce, you will find many business planning utilities and sites - many of them free - that will make it easier by just having you answer questions, after which it will print the entire plan out all nicely and properly formatted. Keep your business plan in a binder or duotang because you will be adding and removing sheets on a regular basis as your business grows and evolves.

Once you have your business plan organized and complete, look it over and ask yourself the hard questions:

- Are your projections realistic?

- Will you be able to support yourself and your family on your business revenues or will you need a job to supplement it?
- Will you be able to run it yourself or will you need help?
- How will this impact your family? This is a very important question, as a family with young children is obviously going to react differently than a family with teenagers or one with no children at all.
- How will it impact your personal life? Will you be able to keep your volunteer schedule? What about your daughter's hockey practice? Will you be able to afford your son's summer camp or will this be the first year he can't go? Did you account for day care or babysitting in your projections?

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Now can I start?

No. Not yet. Now that you've gotten your business plan organized and you see definite promise, it's time to take it to the business development corporation or to you local banker and have them tear it to shreds. They will criticize absolutely everything - they will tell you your projections are too optimistic, there's no market demand, etc. Listen to what they have to say and review your business plan: could they be right? Have you been a bit overly optimistic? What happens if you rework your numbers a bit? Review your business plan again and if you are *certain* and you *know* the business is a winner, head right back in there and show them you mean business.

While all of this is going on, mind you, you are making batch after batch of soap and bugging everybody and their grandmother to try this one, try that one, and boring them senseless with talk of soap, essential oils, debates about the ecological impact of palm oil, and the latest industrial scandal rocking the soap industry. But that's how it is - you *must* become obsessed with your vision. You must eat, sleep, drink, and dream your soap business if you want to get it off the ground because anybody rational would run the other way and get a job at a Body Shop instead.

How much?: Part of your business plan is your marketing plan and that means you need to know what price your soap will have to be in order to bring in a profit. Nobody goes into business intending to lose money - doesn't happen. So if you do your math and you realize that at your current standing, you'd need to sell your soap for $15 an ounce to break even, that's an indicator that something is not right (you're probably paying way too much for supplies, for one).

The nutshell version is: "Retail price of soap - Cost of making soap = Gross Profit"

But the cost of making soap isn't just how much you paid for the lye! You need to factor in:

- Cost of all ingredients - including the water
- Depreciated cost of equipment used (because you'll have to replace everything sooner or later)
- Supplies (such as paper towels)
- Labor
- Electricity
- Cost of space used to cook the soap and cure the bars

- Portion of rental or mortgage paid. If it took one full day in November and you're legally allowed to claim one-sixth of your mortgage or rent for business purposes, then part of that batch cost is 1/30th of 1/6th of the rent. Eg: mortgage is $700/mo including taxes and insurance. Total allowed is $116.67 per month assigned as business expense which works out to $3.89 for the batch. If the batch was 40 bars, then each bar of soap cost 9.7 cents just in space.
- Insurance costs

Each bar of soap much include an amount toward: phone, marketing, utilities, taxes, transportation, shipping and handling, supplies, payroll, etc.

A complete and detailed business plan will give you these numbers at a sweeping glance. It's not possible for me to say "sell your soap for [this much]" - but I can assure you that you will not be selling it for fifty cents a bar! Don't be surprised if your soap rings in at $3 or more per bar once everything is factored in. Here's a quick 'n' dirty example that bears no relation to the real experience (it's just hypothetical example):

Your mortgage is $700, taxes and insurance in; you use your personal car to deliver soap to customers - you have a $170/mo payment on that and about thirty percent of the time, you use it for business; gas costs you about $25 a week; you have to pay your oldest daughter ten dollars every time you do up a batch to prevent the little ones from barging in on you; electricity is about $120 a month; water and sewer are about $30 a month; the ingredients for the batch cost $17; the equipment was bought for $520 dollars and is halfway through its expected life time of two years; you require $8/hr for your time.

You've just spent the day including two hours of actual labor (the rest of the day was spent waiting for it to cool, etc) making up a batch of Hot Processs soap to sell at a craft fair:

- mortgage = $700 / 6 / 30 = $3.89 per day
- car = $170 * .3 = $51 / month or $1.76 per day ($51 x 12 months divided by 365 days)
- gas = $25 x 4.3 (weeks average in a month) / 30 * .3 = $1.08 per day
- babysitting = $10
- electricity = $120 / 6 / 30 = $0.67 per day
- water/sewer = $30 / 6 / 30 = $0.17 per day
- ingredients = $17
- depreciation on equipment = $520 / 730 (days life expectancy) = $0.71 per day
- labour @ $8 per hour = $8 x 2 = $16

We haven't even gotten into marketing, banking fees, loan payments, fees for credit card payments and paypal, etc, all of which have to be accounted for but, so far, if you sold the entire batch for $51.28, you'd break even - cover the costs and have nothing left over. In technical terms, that's called "going out of business".

Let's say the batch was 40 bars - to break even, you would have to sell each bar for $1.28.

The standard profit margin for a retailer is at least sixty percent. For a home crafter, it's much higher as they don't have the option to buy in quantities sufficient to get the lower bulk prices available to larger customers. There is also a higher percentage of spoilage and loss, so that has to be taken into account: of the forty bars in the batch, you kept 5 for personal use; three broke when they came out of the mold; and your daughter wanted one for sleepover camp - that leaves you with 31 bars to sell.

The new price per bar is $1.71 to break even.

If you sold each bar for $2.49, you'd make total sales of $77.19 for a total profit of $25.91 or a return on investment of 50.5%, which is pretty good for one small batch - but can you meet your daily living expenses on a profit of $25.91 a day, or about $673.66 a month? Clearly, you'll either need to have a supplementary job or you'll have to make more soap, which will involve more running around, more marketing expense, more supplies, etc!

Also factor in that each recipe is going to have its own cost - some costs, such as mortgage expense, depreciation, etc, are ***fixed*** (they don't change from batch to batch) but some (such as ingredients) are ***variable*** , meaning they change depending on production. That lovely olive oil soap with the lard to make it a bit more durable is suddenly way more expensive when you swap out the lard for coconut oil. Rose essential oil is going to cost far more than a rose fragrance oil.

In your recipe book, in addition to the ingredients and directions and batch notes, you also need to keep a running record of how much it costs you to make a batch, how well it sells, and what the batch size is going to be. You can't just decide that a batch is 'X' number of bars because some of your soaps will sell far more briskly than others. If you just decide that a batch is "this many" bars, then you run the risk of running out of the popular soaps while being stuck with a glut of not-so-popular soaps.

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Still before you sell: So you've worked out which soaps you're going to sell based on your market research and feedback from friends, family, and survey respondents. You've worked out a beginning estimate for batch size and the approximate cost of production. Now you're ready to roll!

Not quite.

Sure, you could grab a table and arrange your soaps in pretty pyramids and put up a hand-printed index card with prices - but then you'll blend in with all the other crafters selling soaps and that's just no good at all!

You need to assemble your team: particularly at the front end, it's best to have a professional accountant handle your finances. Yes, it will cost - but it will cost nothing next to what it would cost if you did the books yourself and did them wrong!

Unless you have the know-how and time to do it yourself, you want someone to develop and manage your corporate website. This person will be in charge of keeping the site up to date and always evolving, will handle email inquiries, and will ensure that only legitimate emails are forwarded to your attention thus saving you from having to deal with a mountain of spam and scam every day.

An office manager would also be a wise choice - someone to answer the phone and manage bookings while you're busy being creative.

And yes, the same person could totally wear all three hats, so long as it's not you.

This would free up some of your time - small business owners who do everything themselves typically work at least a sixty-hour work week: regular retail hours, then another couple of hours a day doing all the paperwork and bookkeeping. Yes, it's important to dedicate yourself

to your business but it's also important to take care of yourself. Running yourself into the ground is not the way to start and grow a successful business and how can you be creative and innovative if you're bone-deep exhausted all the time?

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Soap Branding

Your company name is the name that goes at the top of your invoices, on the label, and what you say in a positive, friendly tone when you answer a call. As such, your company name must be something that you can live with, that you feel reflects your philosophy, and raises an expectation in the customer. A customer walking into a business called "Snowmobiles 'R' Us" is not expecting to find a garden supply center or even a business that specializes in miniature snowmobile toy replicas.

BUT

Your company name is not your "brand". Your "brand" is what the customer is thinking about even when they're not using your product. It's the persona of your corporate image - who your company would be were it a person walking around.

Think of Ford - "Built Ford Tough"; horses and cows on an open range; lassos whirling through the air; mud splattering everywhere; trapped bulls being popped out of mud holes with an almost contemptuous ease; and midnight bonfire singalongs.

Now think of Volvo - reliable; solid; dependable; exceeds all the safety standards; first to introduce many of today's standard safety features; smiling children in car seats looking out the window at winding country roads and sedate city streets; the car stopping quickly and safely for a mother duck and her babies in the middle of the road.

If someone walked into an auto dealer wearing jeans, a leather jacket, and work boots, which vehicle would you expect them to head for? What if they were wearing a business suit?

Who is *your* customer? What are they wearing: cutting-edge fashions or soft classics? What kind of drink would they be likely to order: a beer? A mimosa? Mineral water with a squeeze of lemon? An Acai berry smoothie?

Let's say you've done your market survey and discovered that recent immigrants from a particular country comprise the majority of your local community. Upon investigation, you find there is a strong interest in natural, home made soap; that the recent immigrants and first-generation children have a strong cultural identity; and that vegetarianism and pacifism are core to that identity. In such a case, "American Bull" would probably be an unwise choice and "Mystic Rose" might be a better idea. Try to avoid the word "soap", as that puts limitations - you may want to branch out into toiletries or cosmetics later on down the road and nobody is going to buy lipstick from a soap company!

Checking with your business registry or trademark office shows that "Mystic Rose" is indeed available and you immediately secure it with the proper applications and fees. *Make sure* you do not skip this step - you don't want to get smacked with a lawsuit later on down the road for trademark infringement! You'll also want to grab a matching web address: if everything is "Mystic Rose", then having to settle for "www.mysticrosesoapcompanyofpoughkeepsie.com" for a web address, while technically correct, is awkward for a potential customer to type out, especially when "ebay" and "etsy" are so much shorter!

On your website or in a shop, a brand named "Mystic Rose" would probably not feature a black and acid green color scheme. Edgy, techno music would be an unpleasant and jarring shock to visitors. Warm pastels and nature-themed music would be more expected, possibly cliché, but remember: ethnic identity. Therefore, finding compatible colors and changing the music to something more evocative of the cultural identity while still retaining your own national identity would be the best way to communicate with your niche market without alienating the "home" crowd.

A great example of this technique is Sapporo Beer (click here to see the image). To North Americans, the tall, slim, gently curved beer can looks extremely Asian in its elegantly simple design while to the Japanese, it looks very American, with its raw industrial steel color and curved profile evocative of the Coke bottle.

What helps the most is if you build a character out of your brand who represents *the* perfect customer:

- Is your character male or female?
- What are his or her interests and hobbies?
- What kind of clothing does she wear?
- What kind of music does he enjoy?
- What sort of restaurant would he or she patronize and what would he or she order while there?
- How does your character speak (slow and easy, sharp and quick, satirical or upfront, etc)?
- What color hair and eyes does your character have?

Everything you produce should reflect your brand: the color scheme; the speech pattern used in ads, blogs, and communiqués (the "voice"); the taglines; and so on.

A fantastic example of this in action is the Duke Cannon Supply Company, makers of Duke Cannon soap (http://dukecannon.com/). Click to visit the website and the first thing you notice is the military, yet not aggressive, feel in the sharp, clean lines; the big font in muted camouflage colors; and the masculine imagery of tools, baseball diamonds, and a rusty, well-used axe stuck in a log. Use of taglines such as "3x the size of most chick soaps", "steel cut grains for max gripability", and "gets you clean, not laid" reinforces the "salt of the earth", straight-shooting, no-nonsense masculine nature of the brand and ties in perfectly with the name "Duke Cannon" who, when all is said and done, sounds like either the main character in a first-person shooter game or like a marine that the Duke Cannon Supply Company served during the Korean War.

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Color your World

Artists have known forever that color impacts mood. When Van Gogh painted "Sunflowers" using a warm golden-yellow palette to express his mood (at the time) of optimism, hope, and good cheer. He was looking forward to the arrival of his friend and mentor, Gauguin, in order to start up an art commune. Contrast that with "At Eternity's Gate", a painting showing the subject in the throes of depression. The central figure is in cold, blue tones while the background is in warm light tones of gold, cream, pink, and red. The effect is that the subject is carrying his own cloud of despair around with him.

It was found long ago that institutions experienced fewer episodes of aggression when the walls were painted pastel tones (blue, green, and pink) than when they were left base white. Inmates were more animated in rooms featuring yellow and orange tones and quieter when blues, purples, and greens were prevalent. Even the pharmaceutical industry has caught on, discovering that warm-colored placebos were reported as being more effective than cool-colored pills. Some evidence seems to link blue-colored streetlights with lower rates of crime in the immediate area while exposing students to the color red negatively impacted their ability to perform on academic tests.

Color can also regulate body temperature: when the thermostat was dropped, people in a cool-toned room reported feeling colder than those in a warm-toned room. When asked to rank colors, people in a cold room ranked warm colors closer to the top of the list while those in a hot room showed a preference for cool colors.

Social perception is also important: one study found that sports teams that largely featured black in their uniforms were more likely to get his with penalties and be viewed more negatively by spectators.

Color was not always so blithely disregarded. Many ancient cultures, including the Egyptians and the Chinese, used color to treat various ailments. Called "chromatherapy", "light therapy", or "colorology", it is today the sole province of holistic, new age, and other alternative healers.

Traditionally, the various colors are assigned specific therapeutic qualities. For example:

Red - stimulates the body and mind, increases circulation
Yellow - stimulates the nerves and purifies the body
Orange - heals the lungs and increases energy levels
Blue - soothes illness and treats pain
Indigo - alleviates skin problems

When it comes to décor or packaging, the assigned meaning becomes more complex and multifaceted, with both positive and negative connotations depending on how the color is used:

Red: a bright, warm color, red evokes strong emotions in the viewer. It is associated with love, warmth, and comfort but is also an intense, even angry, color that generates excitement or passion. Think of how your face turns red when you're experiencing an intense emotion such as anger, embarrassment, or shyness.

Choosing red for your packaging draws attention to your product by stimulating and exciting the customer. The darker the red, the more luxurious it is perceived while the brighter the red, the more energetic and exciting it's considered to be. Think of a high-end sports car - it's probably not a deep red you're picturing in your mind. Remember, though, that a bright red is considered "cheaper" than a deep red, and a cool red is considered more professional than a warm red. Accenting with black can add an "adult sexy time" connotation to your package, perfect for "adult" gift baskets intended for newlyweds and the more adventurous couple.

Compare the effect of these two text blocks:

This is White on Red **This is Red on Black**

If someone handed you these packages, without reading them, which one would you guess contained roses and which one lingerie? Which would be better suited to a rose-scented soap and which would be better for a perfume marketed toward the Woman who Knows What She Wants? Which is better for women and which is better for men?

Orange: is an energetic color often perceived as being enthusiastic, extroverted, uninhibited. It's associated with adventure, optimism, affordability, fun, and adventure - think of the original color scheme for McDonald's when it marketed primarily toward children. When choosing orange as your packaging, make sure you choose a good, solid, saturated color to avoid giving it a cheap aura. Adding other colors will moderate the effect and increase the information you are communicating. Dark blue, for instance, will tone it down and give it a more trustworthy air while black increases the perceived value (be careful to avoid a "Hallowe'en" impression unless it's a seasonal product).

Yellow: is a happy, optimistic, and uplifting color. Some companies choose a yellow color scheme around offices and production rooms as it's believed to be inspirational and mentally stimulating, which helps boost creativity and improve decision-making abilities. Fast-food restaurants choose yellow and other similarly stimulating colors such as red and orange to make customers get up and leave more quickly, as their profit depends on high turnover. Choose yellow for your packaging if your soap is intended to be fun, uplifting, and "zesty". Many Asian cultures prize the color yellow.

Green: is often associated with nature, life, balance, and harmony. When it comes to packaging, a soft green can suggest a product that is natural, organic, healthy, and environmentally friendly. A deep, rich green implies wealth and luxury, as it is the color of the finest emeralds - add a shot of metallics to increase the elegance. A neutral midtone green, such as "sage" or "bamboo" is good for organic and eco-friendly soaps.

Blue: is used most to communicate trust, honesty and reliability, strength, and probity. Just look around at how many financial institutions have blue dominant in their logo and then there's the term "blue chip" to indicate stock that is conservative but solid. Blue is also used in soap packaging to give a sense of "calm, cool, and refreshing" by translating water. Dark blue is serious and conservative, pale or powder blue is softer, gentler. Keep in mind that blue is often viewed by the young as being rather boring and more for the "mature" customer so if you have a product intended for a youth market, punch it up with neon, electric, or metallic blue.

Purple: is often associated with royalty, imagination, a higher level of spirituality, and, in certain healing traditions, the union of body and soul (which is why wizard's robes in fairy tales are often depicted as being purple). Purple packaging gives the impression of luxury, exclusivity, and extravagance, especially if you've bumped it up with gold or silver. If your product is intended to be "New Age", then purple is a very appropriate choice, as it suggests individuality, originality, and spirituality. Choose a lighter shade if your product is more of the "fantasy/nostalgia" type. Pale lavender is often used for baby products, as lavender is known to be soothing and calming.

Magenta: is a tricky color because it is a strong color that triggers a reaction in the viewer. However, while some people see it as being innovative and imaginative, others perceive it as being outrageous and shocking. The trick is the colors you use to accent it. Dark blue, dark green, even dark grey, or black will tone down the energy and give it a bit of gravitas. Metallics add elegance and sophistication. To add a shocking jolt and bump up the energy, use bright pink or orange. Unless you have a background in graphic arts, this is one color you'd be well

advised to take to a professional graphic artist or marketing expert because if you get it wrong, that's a lot of time and money wasted on labels that don't work.

Pink: is a warm and comforting color that is calming and non-threatening. Choose pink if your product is most appropriate for a softer, more romantic market. For a younger audience, soft, pale pinks are feminine and sweetly innocent, while dark pink is charged with more passion and energy. Combining light and dark pink gives packaging a nice balance, resulting in a more sophisticated image. A bright, even neon pink, is more attractive to teens and pre-teens, as it implies a less expensive and trendy product. Dusty or muted pinks is better for the older, more sentimental customer.

Turquoise: is thought to bring clarity of thought and ease of communication. Traditionally, it soothes emotions, replenishes flagging energy, and inspires positive thinking. It's a popular color for health clinics and similar environments as it communicates cleanliness and purity but lacks the cold sterility of white. It is a good choice for soap packaging for much the same reason - it gives the same impression of cleanliness but its softer tone makes it appear less harsh than white. It's a non-gender-specific color, so is good for both male and female marketing but if your target is primarily men, then go for a darker, more saturated turquoise (even going to teal) and for females, choose a softer, paler variety.

Brown: is often associated with the earth - strength, comfort, unpretentious, and mature. Choose the right color and your packaging will give off a "home made", "organic", "wholesome", and "natural" vibe. Choose the wrong brown and your product might come off as poorly made, and of indifferent quality. A deep, rich chocolate brown adds a sensual anticipation to the product, like opening up a bar of luxury chocolate.

Black: is a heavily-charged color for packaging soap. If your soap is a scent intended for someone who has power, authority, and control, then it would work because black packaging lends an air of sophistication and elegance. It also makes the product look more expensive and even mysterious. On the flip side, done wrong, black can make things look intimidating, even threatening (how threatening would a vampire-demon-hellspawn movie villain look were he wearing pastel yellow or powder blue?).

If you're going with black packaging for your soap, select your moderating colors with care. Metallics such as gold and silver up the "luxe" quotient while red adds a sexual aura (keep in mind that the red/black color combination is a part of certain cultures, such as Spain). Pastels soften the message and would attract a predominantly female markets while saturated colors such as magenta and teal call to the non-conformist. Adding neons would give your packaging a playful twist.

Grey : is a quiet, conservative color, usually giving off a neutral, indifferent vibe. It has no energy of its own and is often used just to cover over walls and floors (think basements and garages). It does serve well as a background color against which others can pop. Dark grey can make neons or pastels appears to almost float above the packaging. Pale grey is a good alternative to white, as it has much the same feel but without the blindingness.

White: White is viewed by artists as being the blank canvas, equivalent to virginal innocence and fresh starts. It can also be cold and off-putting. It's a safe color to choose for packaging or décor as it has no emotional tension and you can't beat it for implying cleanliness, purity, simplicity, and sterility.

Naturally, you can't have just a white label and leave it at that - so you need to consider the effect of the colors you choose to go on it: Red adds excitement, yellow gives it a light-hearted

"sunny" mood, black makes it very Art Modern and graphic, and blue makes it cool and serene. Pay attention to how many colors you use, as well - unless that's your schtick, you don't want your packaging to look like an explosion in a crayon factory. "Less is more" holds very true here: the fewer the colors, the easier it is to control the message and the easier it is for customers to quickly grasp what it is you want to convey. It also makes it easier just to read the thing. On the other hand, too few colors, unless done just right, can make your packaging look unprofessional and uninteresting.

Silver: just like gold, implies elegance and sophistication but it's gentler and more flexible, as it mixes well with just about all other colors. Mix it with dark blue for an air of luxury and mystery; purple with uniqueness; and black for sophisticated and a little dangerous. For a modern, hi-tech look, pair silver packaging with blue, turquoise, black, or dark gray and go for linear, angular graphics.

Gold: packaging suggests expensive, luxurious, and high quality. However, it's a tricky, tricky one to pull off: first, make *sure* the gold label is excellent quality - there is nothing worse than a "fake gold" aura for your products as people will automatically perceive it as being deceptive and of poor quality ("not like the *real* stuff"). Add colors to fine-tune your message: red adds excitement or a Chinese aura; black adds elegance and sophistication and dark blue makes it more serious and professional.

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The Language of Flowers

One way you can create a cohesive theme for your product is to draw from a central inspiration. Flowers is a good one - floral scents are very popular and there's an entire language built up around flowers that was used to send covert communications in public between people who needed to be discreet. A woman would have flowers painted on her fan and while she was smiling serenely and apparently ignoring everybody, the "nervous fiddling" of her fan revealed and concealed flowers that sent a steady stream of messages to whomever she displayed them.

For their part, men used flowers as well: one well-known gambit was to send the woman who'd caught his eye a steady stream of bouquets of roses, starting with pure white to signify chaste admiration, then moving to palest pink to indicate an awakening of romantic interest, and gradually deepening through to red to indicate passionate love. If she was seen stepping out with someone else, he might send her yellow roses to indicate jealousy.

The following is a list of the flowers most commonly used and their meanings:

Acacia: A secret love

Amaryllis: Pride

Anemone: Rejected

Azalea (A symbol of womanhood in traditional China): Fragile passion, temperate love

Bachelor Button: Happy to be single

Begonia: A warning

Bittersweet: Truth

Bluebells: Humbleness

Bridal Rose: Marital bliss

Calla Lily: Elegant beauty

Camellia (in general): Admiration, good fortune (for a man)

Camellia (Pink): Longing

Camellia (Red): Passion

Camellia (White): Chaste admiration

Carnation (in general): Fascination

Carnation (Pink): Remembrance

Carnation (Purple): Inconstancy

Carnation (Red): Longing

Carnation (Solid color): Yes/Positive response

Carnation (Striped or variegated): No/Negative or mixed response

Carnation (White): Innocence, good fortune (for a woman)

Carnation (Yellow): Jealousy, rejection

Cattleya Orchid: Mature beauty

Christmas rose: Calming anxiety

Chrysanthemum (in general): Friendship

Chrysanthemum (Red): Passionate Love

Chrystanthemum (White): Truth

Chrystanthemum (Yellow): Rejected

Coral rose: Desire

Cyclamen: Resigned farewell

Damask rose: Obsessive love

Dark crimson rose: Mourning

Dark pink rose: Gratitude

Day lily: Chinese symbol for motherhood; Flirtatiousness

Eucharis lily: Innocent charm

Forsythia: Anticipation

Gardenia: Admiration of beauty

Geranium: Foolishness

Gladiolus: Sincerity

Heather (Purple): Solitude

Heather (White): Protection
Hyacinth: Impetuousness
Hyacinth (Blue): Faithfulness
Hyacinth (Purple): Request for forgiveness
Hyacinth (Red or Pink): Playfulness
Hyacinth (White): Praying for you
Hyacinth (Yellow): Jealousy
Hydrangea: Cold-hearted
Lavender rose: Entranced
Lily-of-the-Valley: Humility, Sweetness
Magnolia: Nobility
Marigold: Jealous grief
Moss rosebud: Confession of love
Musk rose, cluster: Charming
Orange blossom: Eternal love, fertility
Orange lily: Hatred
Orange rose: Intrigued
Orchid: Chinese symbol for fertility; Refined beauty
Pale peach rose: Modesty
Pale pink rose: Grace
Peony: Happy marriage
Petunia: Calming
Red rose: Passionate love
Red rosebud: Pure love
Rose leaf: Hopefulness
Rosebud: An unawakened heart
Sweetpea: Farewell
Tea rose: Eternity
Thornless rose: Love at first sight
Tiger lily: Wealth or pride
White lily: Purity/Virginity
White rose: Secret love
White rosebud: Girlhood
Yellow lily: Superficial cheer

Yellow rose: Platonic love

Single rose in full bloom: "I love you"

Bouquet of roses in full bloom: Gratitude

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What goes on the Label?

You've got your color scheme, now you need to design your label. Before you do, though, consult your local regulatory body about what information needs to be included on the label, as it can mean the difference between a nice little home business and a nightmare of paperwork and regulatory requirements. There's no point designing a lovely, soft minimalist theme in silver and lavender if you then have to clutter it up with black and white information panels and the like because you chose the wrong words to put on it!

In the United States, for example, in order to sell your soap with the least amount of regulatory hassle, it must be soap - real soap, and nothing but the soap. It has to be made primarily of oils/fats and lye - no synthetics - and cannot make any cosmetic claims, such as "moisturizing", "exfoliating", or any other term intended to imply it will improve your appearance. It cannot make any medical or therapeutic claims such as "deodorizing" or "anti-acne".

The reason for this is that "soap" - plain, cleansing soap - falls under the Consumer Product Safety Commission while cosmetics and therapeutics fall under the purview of the FDA.

Under the CPSC, the label needs to have certain information on it:

- An explicit statement that it's "soap" (not a "cleanser", not a "beauty bar", nothing like that - the word "soap")
- How much it weighs at the time of packaging (don't forget, those 4oz bars you cut won't weigh 4oz after they've dried out for a month and a half)
- Business name and address plus any other optional contact information you care to include such as an address or an 800- number.

Compare that to what the FDA has down for cosmetic product requirements on its page at http://www.fda.gov/cosmetics/guidancecomplianceregulatoryinformation/ucm074162.htm :

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The FD&C Act prohibits the marketing of adulterated or misbranded cosmetics in interstate commerce.

- “Adulteration” refers to violations involving product composition--whether they result from ingredients, contaminants, processing, packaging, or shipping and handling. Under the FD&C Act, a cosmetic is adulterated if--
- "it bears or contains any poisonous or deleterious substance which may render it injurious to users under the conditions of use prescribed in the labeling thereof, or under conditions of use as are customary and usual" (with an exception made for coal-tar hair dyes);
- "it consists in whole or in part of any filthy, putrid, or decomposed substance";
- "it has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to

health";

- "its container is composed, in whole or in part, of any poisonous or deleterious substance which may render the contents injurious to health"; or
- except for coal-tar hair dyes, "it is, or it bears or contains, a color additive which is unsafe within the meaning of section 721(a)" of the FD&C Act. (FD&C Act, sec. 601)

“Misbranding” refers to violations involving improperly labeled or deceptively packaged products. Under the FD&C Act, a cosmetic is misbranded if--

- "its labeling is false or misleading in any particular";
- its label does not include all required information. (An exemption may apply to cosmetics that are to be processed, labeled, or repacked at an establishment other than where they were originally processed or packed; see Title 21, Code of Federal Regulations, section 701.9.)
- the required information is not adequately prominent and conspicuous;
- "its container is so made, formed, or filled as to be misleading";
- it is a color additive, other than a hair dye, that does not conform to applicable regulations issued under section 721 of the FD&C Act; and
- "its packaging or labeling is in violation of an applicable regulation issued pursuant to section 3 or 4 of the Poison Prevention Packaging Act of 1970." (FD&C Act, sec. 602)

Under the FD&C Act, a product also may be misbranded due to failure to provide material facts. This means, for example, any directions for safe use and warning statements needed to ensure a product's safe use.

In addition, under the authority of the FPLA, FDA requires a list of ingredients for cosmetics marketed on a retail basis to consumers (Title 21, Code of Federal Regulations (CFR), section 701.3). Cosmetics that fail to comply with the FPLA are considered misbranded under the FD&C Act. (FPLA, section 1456) This requirement does not apply to cosmetics distributed solely for professional use, institutional use (such as in schools or the workplace), or as free samples or hotel amenities.

FDA can take action against cosmetics on the market that are in violation of these laws, as well as companies and individuals who market such products.

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So now, not only must you include the three items required by the CPSC, but you also must include the following (from http://www.fda.gov/cosmetics/cosmeticlabelinglabelclaims/default.htm):

What labeling information is required?

The following information must appear on the principal display panel:

- An identity statement, indicating the nature and use of the product, by means of either the common or usual name, a descriptive name, a fanciful name understood by the public, or an illustration [21 CFR 701.11].
- An accurate statement of the net quantity of contents, in terms of weight, measure, numerical count or a combination of numerical count and weight or measure [21 CFR

701.13].

The following information must appear on an information panel:

- Name and place of business. This may be the manufacturer, packer, or distributor [21 CFR 701.12].
- Distributor statement. If the name and address are not those of the manufacturer, the label must say "Manufactured for..." or "Distributed by...", or any other wording that expresses the facts [21 CFR 701.12].
- Material facts. Failure to reveal material facts is one form of misleading labeling and therefore makes a product misbranded [21 CFR 1.21]. An example is directions for safe use, if a product could be unsafe if used incorrectly.
- Warning and caution statements. These must be prominent and conspicuous. The FD&C Act and related regulations specify warning and caution statements related to specific products [21 CFR part 740]. In addition, cosmetics that may be hazardous to consumers must bear appropriate label warnings [21 CFR 740.1]. Flammable cosmetics are an example.
- Ingredients. If the product is marketed on a retail basis to consumers, even it it is labeled "For professional use only" or words to that effect, the ingredients must appear on an information panel, in descending order of predominance. [21 CFR 701.3]. As an alternative, when cosmetics are distributed on a mail-order basis, the package mailed to the consumer may contain readily visible instructions for locating the ingredient declaration, such as in a product catalog (currently interpreted as including a website), or instructions for requesting a copy of the ingredient declaration. Mail-order distributors must respond promptly to such requests [21 CFR 701.3(r)]. Remember, if the product is also an OTC drug, its labeling must comply with the regulations for both OTC drug and cosmetic ingredient labeling, as stated above.

* * *

In order to meet the requirements of just these two sections, you would have to have a certified and inspected manufacturing facilitys (in order to prevent the likelihood of "contaminants"); your lovely, minimalist japanese-themed label for your green tea soap just got *way* busier because you have to include directions for use (because if you don't, someone could use soap wrong by, say, trying to wash their eyes or something); the ingredients list (which, as you can see from some of the recipes, can be quite extensive); and if you're using a commercial melt-and-pour or you're rebatching another soap brand, you have to include that information too!

So yeah: stick to marketing it as just "soap".

Customers are not stupid, however: if they see "bentonite clay" or "ground apricot kernel" or "goat's milk" in a soap, they know what qualities those impart to the final product so it's worth it to include the ingredients list. Just to avoid hassle, follow the FDA requirements:

- List ingredients from the highest percentage of the formula to the lowest (it's one reason the percentage of oils is included in the recipe)
- Use the most commonly accepted identifier, such as "bentonite clay" instead of "montmorillonite"

- You don't need to get micromanagerial about it, though - fragrance can be just "Fragrance" (or, if you want to get chi-chi-fou-fou, "Parfum") and anything that's less than 1% of the recipe can just go in any old order at the end of the list, kind of like the "also starring (in alphabetical order)" part of the movie credits.

When it comes to putting down the ingredients, you have two options: you can put down what's on the recipe, or you can put down what's actually in the bar at the point of sale. Remember, they're not the same - sodium hydroxide goes in the recipe but there is none in the soap (or at least there better not be!). Oils and fats go in the recipe, but it's fatty acids in the actual soap bar. Your recipe might have "beef tallow, palm oil, and lye" but the soap has "sodium tallowate and sodium olivate".

"Sodium tallowate" and "sodium palmate" can be intimidating to people who only see chemical names, so it's best to use plain, simple, everyday language (except use "sodium hydroxide" instead of "lye" - everybody knows what lye is and can get a bit leery, but people who know the term "sodium hydroxide" also under what happens in the soapmaking process). Also to consider is that your ingredients list will be longer if you use the second variation: not only do you have to list "sodium tallowate" and "sodium palmate", but also you have to list "beef tallow" and "palm oil" because there's still some left due to superfatting.

There's nothing wrong with putting the ingredients on the back and on the front, highlight the additives, something like "Contains natural Tea Tree Oil, Bentonite Clay, and Lavender Oil". You're not making any claims as to therapeutic or cosmetic uses, you're just highlighting the ingredients.

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FDA Regulations

from:
http://www.fda.gov/Cosmetics/GuidanceComplianceRegulatoryInformation/ucm074201.htm

And what if it's "soap"?

Soap is a category that needs special explanation. That's because the regulatory definition of "soap" is different from the way in which people commonly use the word. Products that meet the definition of "soap" are exempt from the provisions of the FD&C Act because—even though Section 201(i)(1) of the act includes "articles...for cleansing" in the definition of a cosmetic—Section 201(i)(2) excludes soap from the definition of a cosmetic.

How FDA defines "soap"

Not every product marketed as soap meets FDA's definition of the term. FDA interprets the term "soap" to apply only when

"...the bulk of the nonvolatile matter in the product consists of an alkali salt of fatty acids and the product's detergent properties are due to the alkali-fatty acid compounds, and the product is labeled, sold, and represented solely as soap [21 CFR 701.20]."

Products that meet this definition of soap are regulated by the Consumer Product Safety Commission disclaimer icon (CPSC), not by FDA. Please direct questions about these products, such as safety and labeling requirements, to CPSC.

If a cleanser does not meet all of these criteria...

If a product intended to cleanse the human body does not meet all the criteria for soap, as listed above, it is either a cosmetic or a drug. For example:

If a product
- consists of detergents, or
- primarily of alkali salts of fatty acids, and
- is intended not only for cleansing but also for other cosmetic uses,
- it is regulated as a cosmetic. Examples of cosmetic uses include making the user more attractive, by acting as a deodorant, imparting fragrance to the user, or moisturizing the skin.

If a product
- consists of detergents, or
- primarily of alkali salts of fatty acids, and
- is intended not only for cleansing but also to cure, treat, or prevent disease, or to affect the structure or any function of the human body,
- it is regulated as a drug, or possibly both a drug and a cosmetic. Examples include antibacterial cleansers and cleansers that are also intended to treat acne.

If a product
- is intended solely for cleansing the human body,
- has the characteristics consumers generally associate with soap, and
- does not consist primarily of alkali salts of fatty acids,
- it may be identified in labeling as soap, but it is regulated as a cosmetic.

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Putting it Together

You've carefully thought out the colors you want to use, you have everything needed for the label, it's all come together - but now what do you do?

Banding: By far, the easiest way to package your soap is just to band it: a simple strip of cardstock with information printed on it or even a pretty ribbon or a textured string like jute. Check your local jurisdiction to confirm that a tag held on with string holding the required information is sufficient or if you actually have to affix the information directly to the soap. The biggest problem is that soap keeps shrinking so there will come a point when the band is so loose it looks unprofessional and then it will just fall off.

Shrinkwrap: One way around that is shrinkwrapping. Shrinkwrapping will prevent the bands from falling off, give you an easier surface on which to slap an adhesive label, and will keep your soap clean and free from dust, grime, and fingerprints. On the flip side, it will slow the

rate at which the soap dries and make it difficult for customers to get an accurate idea of the scent. With shrinkwrap, you don't even really need the band - you could just print up a bunch of pretty labels and stick them on. You don't need to invest a lot in a fancy shrinkwrapping machine: use store-bought cling film and heat it with a blow dryer or heat gun. Voilà!

Boxing: Another really easy way is to plop the soap into a soap box. You'll want a box that's the proper size: not too exact-fitting, or it'll get scuffed on the way in and out; not too big or it'll get marred from being rattled and banged around in there. You need a goldilocks box: one that's "just right!". You can choose solid boxes and have them done up in your color scheme and have the information (including an image of the soap) printed right on them or you can choose windowed boxes that allow customers to get a peek at the soap before they buy it.

Half-boxing: This is kind of a cross between banding and boxing - it's basically a five-sided box, leaving the sixth side open so the soap can air and the customer can see it. Again, you can use shrink wrap or a ribbon, etc, to prevent the soap from falling out. You can get really creative with this: for a variegated soap that feature ribbons of blue and white, for example, the half-box could have an image on it featuring a tropical beach and the soap becomes waves for surfers. A green soap with a rough outline could become trees for a mystical pool in a forest glade while the same soap in lavender or white could become night-time clouds.

Wrapping: A really pretty way to package your soap is to wrap it up like a present. This obviously takes more time but it does add a serious "hand made with love" cachet to the product, especially if you choose cute little stickers or blobs of sealing wax or ribbon, jute thread, etc, to secure the ends rather than plain old dollar-store cellotape. You can use metallic foils for fun, funky soaps; layers of tissue paper for soft, luxurous spa soaps; even scraps of fabric that could double up as mini wash cloths. A stack of small sample-sized soap wrapped up like little presents would make an adorable Christmas presentation or you could wrap and stack several variously sized soaps and decorate them to resemble a cake for bridal or baby showers.

A word about round, leaf-shaped, and other irregular shaped soaps: the shape makes it awkward to package them. Banding is not efficient because when the soap shrinks, that's it - the band's gone. Boxing works but the square box kind of ruins the whole dynamic you were going for and specialty packaging such as hexagonal or round boxes are much more expensive than square or rectangular. Your best option is wrapping or bagging. For best results when wrapping, make sure the wrap is pleated evenly around the soap and use a good, strong label to hold down the ends.

Bagging: Bagging is a fun way to package your soap - you get a little bag and you drop the soap in and there you go. Again, check to make sure that a tag affixed with string, cord, or ribbon is sufficient because you might have to secure a label onto it or drop a card inside with the soap. Choosing bags that can double up as shower poufs or washcloths is a great way to get value-added interest from customers. Bags made of luxurious fabrics add perceived value while bags that can double up as purses to hold children's soap would nail the parenting market. They're also easy to make at home from scrap fabrics, rather than having to shell out for a custom print job - what a great way to get your kids involved and teach them the basics of sewing while you're at it!

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A Word about Images

If you choose to use images on your label, *make sure* they are copyright-free. You may use pictures you've taken yourself for the purpose; photos of historical sites that "lack originality" (in other words, a dead-on shot of the Parthenon or the Empire State Building but not one that has been altered in any way to create an appearance that is not the same as the original - turning the Parthenon pink, for example) although be aware that the photographer still has rights to his creation; and images that are Common License.

Be careful of the images you use - images of cute little puppies might be adorable and express what you wanted for your product, but dogs are *haram* for Muslims so you could knock out an entire market segment if you live in an area with a large Islamic population. There's one case of a home cosmetic manufacturer who used a picture of Foxglove on her eyeshadow strictly because the color reflected the shade of the makeup. Foxglove, unfortunately, is a deadly poison. Not a good message.

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Getting the Word Out

When developing your brand, you need to diversify your marketing strategy - don't just rely on leaving stacks of little brochures printed on tri-folded 20lb bright white bond on the counter or coffee table at a salon or pinning one up on the community notice board. That is static advertising - it talks "at" your customer. "Here - read this if you're bored."

You need to engage the customer and that means interaction. A website will be your most powerful marketing tool. The longer you can keep your customer browsing your site, the more imprinted your brand will be on the customer. Of course, you'll have a catalogue and online shopping cart and whatnot - but what about a blog? What about an online serial - "The Horrid Adventures of Grubby George" where a child gets into all kinds of dirt-generating trouble and thanks to Mom and the makers of [insert brand name] soap, he is sorted out all right as rain again (Hey, it worked for Proctor & Gamble - remember a couple of little shows called "Guiding Light" and "As the World Turns"? Now you know the origin of the term "soap opera"!)? A well-presented video blog is always a winner - discussions on your various soaps: how they were inspired, what ingredients are used and why, perhaps a funny story about making or selling the soap; that's the sort of thing that will capture and engage your customer.

Other ideas to build brand some recognition include:

- A regular column in the local newspaper discussing soap-related matters such as health and hygiene; public health's new policy on hand-washing; the dangers of alcohol-based sanitizers for children when a good washing with soap is just as effective; the proper way to wash hands; the impact of the global shortage of [something] on soap production; the effect of increased demand for palm oil on third-world ecologies and indigenous cultures; etc.
- A spot on the local community radio or television station.
- Sponsoring a sports team, craft fair, or art event
- Holding soap-making workshops through the local community college.

- Providing care packages to be distributed through your local maternity support organization, elder care facility, group home, etc.
- Doing a presentation for the local high school - science, math, home ec, and phys ed would all be relevant classes.
- Partner up with other businesses that are complementary - for example, you could partner up with someone who makes gift baskets or with a local spa or gym.

The more you can bring your character to life, the more "real" your brand presence will become. By making your brand presence real, your company will be present in your customers' lives, rather like a good friend who just doesn't happen to be around at the moment. Whenever your customer thinks of "soap" or "washing" or anything related, your brand will be reinforced - this leads to brand loyalty, repeat sales, and word-of-mouth advertising.

Now that you have your brand identity and your marketing strategy sorted, where are good places to sell? These days, you can sell online, you can sell offline through traditional means, but you can also sell remotely, such as through classified ads and sponsored articles in relevant publications.

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Where to sell online

The high-powered standards: Etsy , Amazon , and Ebay are the gold standard "go-to" sites for customers looking for goods. Opening a shop is relatively straightforward and they are rich with features, many customer payment options, protection for both buyer and seller, and massively high visibility (at least for the site - maybe not so much for the individual seller in the site).

Another thing they tend to be "rich" in is fees so it's important to dedicate a good amount of time building up, maintaining, and promoting your online shop. You'll need to really spend time promoting your shop because there are *so* many shops in those sites that it's difficult to make sure you're being seen by your target audience. For example, you might be required to use keywords that are so generic that it's nearly impossible to have your site stand out as any different from the others.

The biggest problem with these services is the encroachment of mass producers from places like China, India, and Mexico. When there are machine-made silver pendants selling for two dollars with free shipping, a silversmith is not likely to get much interest in a $50 hand-crafted pendant, no matter how beautiful it is.

Free online listing services: Kijiji , and Craigslist are the grandaddies of the free online listing world. Unlike typical online shops, there is no shipping involved - customers will come to you (or you can deliver). These are good for building up a local reputation, as well as for taking custom orders. A bonus is there are no listing fees for the basic ad and to promote your ads costs very little. Transactions are essentially cash based, so transaction fraud is minimized.

Unfortunately, cash-based also means you're limited as to how you can accept payment: perhaps while there to pick up a few blocks of your goat milk soap, the customer has fallen in love with the batch you've only just now finished labeling but alas - she didn't bring any extra money with her. "I'll come back" (but you know she probably won't). Make sure you have

plenty of samples available - when she has an actual sample soap in her hand, she's more likely to return for more of it.

The new kids on the block: eCrater , Artfire , iCraft , and Craft.ly (aka "goodsmiths") are all relatively new sites. Because they are new and anxious to build up a following, it's little to no cost to open up a shop and transaction fees are generally lighter. They tend to be less feature-rich than the Big Three however it's easier for a shop to stand out when there's only a dozen or two competitors compared to hundreds or even thousands of competitors. They emphasize and even enforce "hand made" - Craft.ly will lock or shut down any store that sells items that do not meet their rather rigorous definition of "hand made": A lovingly restored dresser, for example, is not hand made but the same dresser converted into a bathroom vanity does qualify. This is good for keeping down the threat from mass-producing competitors.

The downside is, of course, that they're new. They have little to no market recognition although the ones mentioned here have done an excellent job of choosing names that are either easy to remember or else make it very clear what they're about.

When selling online: *make sure* you fully understand the terms and conditions and fee structure. Selling online is no good if you're going to lose money on shipping costs or fees with every transaction, nor is it any point to sell online through a site if you're required to charge $10 or $12 for a 4oz bar of soap to make any kind of profit!

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Where to sell offline

Local newspaper classifieds: an ad in the local newspaper can be very inexpensive if it's a small-town weekly or rather expensive if it's a metropolitan daily, but it can more than pay off for itself. You'll want a picture ad, not a straight text ad, that highlights and emphasizes your product and gives many avenues by which you can be contacted (phone, email, fax, web address, street address if applicable).

Flea markets : Flea markets, community garage sales, farmer's markets, and other such events are excellent places to set up an attractively arranged table stocked with individual products and gift baskets.

Your local Welcome Wagon: many communities have a "Welcome Wagon" organization that welcomes new members to the communities with a selection of items and coupons, as well as informational brochures about the neighborhood (info such as where local schools are, where emergency services are located, garbage pickup schedule, local community organizations and events, and so on). Contact them (usually through the Chamber of Commerce or the local parish) and see about providing sample-sized soaps with your business card in their gift baskets.

Local spas and B&Bs: Spas - particularly those that promote "naturopathic" or "holistic" techniques - and Bed and Breakfasts might be very interested in a local source of hand made soap, particularly if you make it to order and provide them with a "signature" scent.

Local elder care facilities and day cares : keep in mind that there may be labeling requirements when approaching these types of potential customers, but elder care facilities and day cares might be very interested in chemical-free, natural soaps that are soft and nourishing for the skin.

New Mother and similar organizations: like the Welcome Wagon, New Mother organizations present expectant or new mothers with a selection of items such as baby supplies, maternity supplies, informational pamphlets, etc. Mix up a batch of mild soap suitable for babies and a calming, soothing beauty soap for mom (choose scents that help her calm down and relax, such as lavender or honeysuckle) and provide samples in pretty labels with your business information printed on them.

At the mall : many malls have the option to rent a table, booth, or kiosk. It may not profit to man one year-round but definitely give it a go during high-traffic times such as the Christmas run-up and just before Valentine's Day.

Consignment : Contact local salons and inquire about a consignment arrangement, where they agree to place your products in their shop and handle the sales in return for a commission.

Alternative Health Stores and independent pharmacies : Stores that focus on organic, free-trade, and chemical-free products might be very interested in stocking your products. Independent pharmacies that are not bound by franchising contracts are easier to convince to at least give your product a trial run.

Direct marketing: Walk around and deliver sample sizes of your products with your business card and a promotional brochure to homes and businesses around the community. Hey, it works for Avon!

Soap parties: have a party - offer refreshments, arrange for a presentation or a guest speaker, sell your soap, and take custom orders. Offer the hostess an incentive - free soaps or a percentage of sales, etc.

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Where to buy supplies

The one place you don't buy supplies for manufacturing soap if you intend to make batches of any size at all is your local grocery store or pharmacy. That may be fine to pick up a quart bottle of olive oil if you're going to be adding an ounce or two here and there for superfatting or mixing in colors, etc, but there is no way you can purchase your ingredients at retail price and be able to price your soap at all competitively.

Pick and Mix

One way to get into soapmaking is to buy kits containing measured amounts of blended oils and/or fats and lye from places such as Summer Bee Meadow . No measuring required except for the water! It's more expensive than kitting up from scratch but it does allow you to master the technique before you get into any fiddly math so if something goes wrong, at least you know for sure it wasn't that the main ingredients were the wrong kind or that you'd done the math wrong!

Fats and oils

For oils, look for bulk wholesalers. You can likely find at least one in your local phone book - call and get price quotes on the oils and fats you will need the most, such as:

- Olive oil
- Coconut oil and
- Palm oil (if you're using it - some prefer not to for environmental concerns)

You will also eventually want to branch out, so make sure you research other ingredients such as

- Shea Butter
- Mango Butter
- Stearic Acid
- Almond oil
- Hemp oil
- Soybean oil

For fats and tallows, contact a local meat processor. Many of them render down scraps and sell the lard and tallow in bulk. If you want to be *really* hard core, either save your own scraps or make arrangements to buy fat scraps and render your own.

Lye

Again, check your local listings first for a chemical, soap making, or bakery supply company in your area - even if the unit price is a little higher than it is online, you'll end up saving if you can just go over and get it rather than pay for shipping and handling and also possibly customs and excise duties if you bought from out of country. Check your local government requirements - some jurisdictions require special permits or procedures for hazardous materials and be aware that many postal systems won't carry them at all for security reasons so it would have to be shipped directly.

Where to buy online

If you have nobody local, there are many suppliers online. Some, such as Amazon , are more like flea markets while others, such as Essential Depot , are actual businesses with consultants who will answer any questions or concerns you may have about working with lye. The advantage of working with a dedicated soapmaking supplier is that you can grab everything you need in one place and save on the shipping costs. The disadvantage is that the price is not as low as it is if you went directly to different manufacturers and obtained the lowest possible price per item.

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White Labeling

Sometimes, you just can't make your own - white labels to the rescue!

Remember back when we discussed marketing your soap and how you could arrange to provide a "signature" soap for spa, salons, and restaurants? That is white labeling - your name appears only in a little blurb on the label "manufactured for ABC Salon by XYZ soaps". Everything else on the label is your customer's, rather as if they manufactured the soap themselves in a secret basement laboratory.

It can work the other way, too: you can approach a soap-making company and place your order, design your labels and wrappers and everything else, and as far as anybody knows (as long as they don't read the fine print on the label), you are the one who manufactured the soap. This is one way to get your soap business off the ground ASAP while you develop your own recipes. You have a product of guaranteed quality to establish a reputation with and after that, it's just a matter of filling out your product lines with your own recipes.

Many companies offer white labeling services, ranging from the cheapest commercial quality all the way up to certified organic handmade. Some provide packaging and labeling services, others do not. This is one of those situations where the more you buy, the cheaper your per-unit cost runs so it does pay to buy in bulk.

Each manufacturer has their own terms and conditions, so make *sure* you fully understand them before committing a significant amount of time and money into a business relationship before discovering that it's not working in your best interest. Also ensure you are fully aware of relevant business and copyright laws in your area - some jurisdictions have specific labeling requirements that apply if you are not the original manufacturer.

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Branching Out

Selling soaps lovingly made with your own two hands is rewarding - however from the customer's point of view, it's not much of a shopping experience if all you have is soap here, soap there, and, just over there, more soap. When setting up your sales area, think of other things that complement your product:

- soap dishes (and matching bathroom accessories) that complement the soap's colour
- pretty covered soap storage dishes, so the light doesn't fade natural colors (make sure they drain so the soap doesn't dissolve into a pool of goo)
- soap related accessories, such as loofahs, bath poufs, exfoliating mitts, wash cloths, scrub brushes for body and nails, facial cleansing cloths, etc.
- attractive clear containers such as apothecary jars or acrylic boxes to hold mini soaps and sample-sized soaps for guest use
- premade little kits (e.g., for sleep-away camp, for a weekend getaway, for B&Bs, etc)
- projects such as those found on the following pages
- storage boxes made of wood or ceramic, etc, to hold soaps neatly in the cupboard or on the shelf
- towel sets that coordinate with your soaps

These items can be bought wholesale through local outlets found in your yellow pages or online through a site such as DHGate or AliBaba that specializes in listings from wholesalers. Again,

if you are buying from an international supplier, make sure you fully understand all the customs and excise laws, requirements, and duties that apply to your situation.

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Cool Soap Project #1: Facecloth and Soap in One!

Have you ever stood in the shower staring at the empty hook where the washcloth is *supposed* to be and thought how nice it would be to always know there'd be a washcloth when you needed one? Have you ever sat in the tub staring at the opaque surface and thought how nice it would be if soap wasn't just so darned slippery?

You, my friend, are in luck. This is probably one of the coolest projects ever: a washcloth with a built-in soap bar! Or a soap bar with a built-on washcloth (either way).

Gather up your supplies:

You need a bar of soap - any of your recipes will do but not ones with exfoliants like seeds etc (it won't ruin the project, they'll just be completely irrelevant to the end result). It also helps to pick one that really lathers well.

Raw wool - called "roving"in the trade

Hot water (*really* hot!)

A washboard or some other kind of firm, ribbed surface helps - it's not mandatory, but it does help move things along. A bamboo beach mat, that kind of thing.

Also useful but not mandatory is the cut-off foot off a pair of nylons to hold the wool in place around the soap.

Step 1: Spread the wool out into the size and shape of a normal washcloth. Set the soap on top, then wrap the wool all around it, completely encasing it. It's going to feel really loose and floppy but don't worry about that. Since you're at it, you can play with different colors - make stripes or layers of different colored wool. (If you're using the stocking, now is when you drop the whole thing in)

Step 2: When the bar is completely wrapped up in wool, trickle hot water onto it until it's completely "wet" but not "soaked". You don't want water slopping everywhere. It *is* going to look wierd - just hang in there; there's a point. Start massaging it (go easy - you don't want to knock the wool out of alignment and expose the soap). Keep dribbling hot water onto it as you squish and massage away. You'll get lather - that's perfectly okay - and you'll feel the wool start to shrinkwrap around the soap, which is the whole point of this process. Keep going (yes, it takes time).

Step 3: Now that the wool has shrunk down and is clinging to the surface of the soap, this is when you use the ribbed surface and really go to town! Start scrubbing the bar on the ribbed surface and make sure you get all six sides. You don't really need the ribbing, it just speeds things up a heck of a lot plus your hands won't get tired from all the massaging required to felt the thing by hand.

Step 4: Once the wool's tightened up as far as it's going to go and isn't shrinking any more, rinse off the lather, blot the bar on a washcloth or towel (try to get as much moisture soaked up as you can), then set it aside to dry.

To Use: The first time you use the bar, it takes a while to break it in and get some lathering action. Don't worry - be persistent: the water has to work through the tightly-matted wool fibers and then the lather's got to work its way back, so be patient. Once it does, you'll love it!

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Cool Soap Project #2: Family Together Time!

This is a fun project you can do with your kids and give them something they can feel special about.

What you'll need to make 2 bars weighing 4oz each:

- 8 oz clear soap base - get this from a craft store; make sure it's clear, not opaque
- Soap fragrance - choose mild for littles, fun 'n' funky for older kids
- Soap molds - 4oz capacity, basic rectangle
- Foam shapes - letters, geometrics, animals, etc; the bath foam kind works well
- 2-cup capacity measuring cup (make sure it's safe for the microwave)
- Instant-read thermometer
- Rubbing alcohol (isoprop) in a spritz bottle
- Long toothpicks, skewers, knitting needles - anything long and pointy
- Veggie oil

What you'll be doing:

1. Apply a (very!) light coating of vegetable oil to the soap molds.
2. Chop up the soap base into cubes about twice the size of a standard die. Put half in the measuring cup and zap on full power for 15 seconds, then every 5 seconds until the soap is melted - do NOT let it boil!
3. Remove from the micro, stir in fragrance to liking, and mix thoroughly.
4. While waiting for it to cool, organize the foam bits - they have to be assembled for use in mirror-fashion: backwards and in reverse order (confirm by checking them in a mirror).
5. Keep monitoring the soap using the thermometer and when it drops to 120 degrees, remove the skin and fill the soap molds 1/4 to about a third full.
6. Let that sit for up to ten minutes or until it's formed a skin strong enough to hold the foam pieces. Spritz the foam with rubbing alcohol and set them in the backward/reversed order on top of the soap film. Tweak using the skewer/whatever. Now you let that sit for ten minutes.
7. Repeat the chopping/heating/fragrance-adding (and who says it has to be the same fragrance, right?) and so on, let it cool to 120 degrees. Spritz the surface of the soap and the foam bits generously with isoprop (importantly, if you want your layers to actually laminate) - then pour the melted soap over the foam pieces until the foam is *barely* covered. Let that sit for another ten minutes.
8. Once that's done and the letters are good and solid, you'll have to reheat the remaining soap in the measuring cup. Stir up well and wait until it's cooled to 120 degrees, spritz down the soap film with isoprop, and fill the soap mold the rest of the way up. *Immediately* spritz the surface with isoprop - this helps keep down marks from bubbles that rise up to the surface and pop.
9. Don't try to unmold before it is completely cool. If you're really impatient, put it in the fridge but not in the freezer. Silicone unmolding is easy - just pop them out from the back and they're good to go (Melt-and-pour does not require any cure time, although a week or so to dry out might be recommended in some cases). Melt and pour soaps need to be

shrink wrapped, otherwise they dry out like crazy and will not produce any lather. If they're not being used immediately, be sure to affix a label so you can use the soap in proper order (oldest to newest).

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Cool Soap Project #3: Toddler Time

This is a great project you can do with your carefully supervised preschoolers and toddlers.

What you'll need to make eight balls

- Cheese grater (use a dedicated cheap hand-held one, not your prized Moulinex!)
- 4 bars of soap, four to five ounces each, all the same or complementary colors and scents
- 8 waterproof little toys, marbles, gemstones, etc, to be revealed once the soap's been used enough

What you're doing:

1. Shred all the soap into a big bowl.
2. Mix in lukewarm water, a little at a time, until the mixture has the consistency of modelling clay.
3. Make a ball, then poke a hole into the centre and insert one of the objects. Follow up with more soap mixture and form it until you have a solid ball and the object is completely hidden. Repeat eight times or until the mixture's used up.
4. Place the balls on a lined cookie sheet to dry, turning every 12hrs until fully dry (usually 24 to 48 hours)

Other ideas:

- Use the mixture to model up different shapes as seasonally appropriate
- Make two small batches of two different colors and have fun making different patterns
- Shred clear soap and embed the pieces into the opaque ball for an interesting "stained glass mosaic" effect.

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Cool Soap Project #4: Fun and Functional Bath Figures!

These make great gifts and add a touch of whimsy to the bathroom.

What you'll need:

- Melt-and-Pour Soap (transparent)
- Soap - your choice
- A soap dish or similar large enough to hold the toy with room to spare (this will serve as a mold)
- Any temperature-safe bath toy such as little rubber animals, birds, and ducks, or even plastic boats.
- Coloring for the clear soap base
- Spritz bottle filled with Isopropyl alcohol (rubbing alcohol)
- Whatever scent you're using
- Cheese grater (use a dedicated cheap hand-held one, not your prized Moulinex!)

What you're doing:

1. Coat the dish with oil or line it with cling film. Melt clear base in microwave by zapping on high in short bursts until it's all melted. Add the color and fragrance of your choice. Fill the dish to within 1/4" to 3/8" from the rim. Let it sit.
2. Once a skin forms, position the toy, pressing gentled to seat it well into the soap. Give the toy and the soap a generous spritzing of isoprop and then finish pouring right up to the edge (the smell of isoprop will dissipate).
3. Using the grater, shred a bunch of the soap bar you chose and arrange them around the toy to look like tossed waves,blowing snow, etc.
4. Let the soap cool thoroughly (at least 24 hours) before unmolding.

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Cool Soap Project #5: Color-Changing Soap Bar

These soaps are lots of fun! Read the entire thing through to determine how much of each ingredient you'll need. You'll be using the Milling technique, so this is not a quick project but the result is very worth it.

What you'll need for each bar:

- Melt-and-Pour Soap (transparent)
- Soap - your choice
- A small decorative mold (heart, star, shell, etc)
- Two or more bar molds, one small enough to fit inside the next with at least half an inch to spare.
- Coloring (you can leave either the clear or the opaque as-is or choose a different color for each later.
- Spritz bottle filled with Isopropyl alcohol (rubbing alcohol)
- Whatever scent you're using (use the same throughout the bar or change for each layer - just make sure they work together nicely!)
- Cheese grater (use a dedicated cheap hand-held one, not your prized Moulinex!)

What you're doing:

1. Prepare the tiny molds or at least line them with cling film. Grate up enough soap to fill the molds into a metal bowl. Add just enough moisture (water, coconut milk, goat's milk, oil, herbal-infused water or oil, aloe gel, etc) to the soap to wet it - only just enough! Set the bowl over water held at a strong simmer and continuously stir smoothly and gently with a wooden spoon, adding just enough liquid as required to prevent it from drying out. Don't stir too vigorously or there'll be a lathery mess and don't let it stick to the sides or the bottom.
2. When it's all translucent, add your color and scent.
3. Fill the small molds, making sure to carefully knock any air bubbles out.
4. Freeze the molds for up to an hour, then carefully remove the soaps and set aside.
5. Prepare the smallest bar mold by coating with oil or lining with cling film. Melt enough clear base to fill the smallest bar mold by zapping on high in the microwave in short bursts until liquid. Add the color and fragrance of your choice. Fill the mold about 1/4 of the way up and let sit until a film forms. Set a small soap in the center and let sit for ten minutes. Spritz the surface of the film and the small soap with isoprop and fill the mold the rest of the way. Spritz the surface generously with isoprop. Let harden for 24 hours.
6. The next day, rebatch enough soap using the same technique in step 1 to fill the next largest bar mold about half way. Fill the mold about 1/4 of the way, then let sit until a film forms. Set the smaller bar on top, let it rest for another ten minutes, spritz with isoprop and top off the mold.

7. Repeat, alternating clear with white for as many layers as you choose.

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Cool Project #6: Stained-glass or Mosaic Soap

These soaps have a definite "Wow!" factor. You can follow the instructions as is or you can switch the clear and white soaps for an interesting twist.

What you'll need:

- Melt-and-Pour Soap (transparent)
- Soap - your choice
- Small bar molds, one for each color
- Large bar mold
- Colorants for the clear soap base - choose rich, saturated colors for best effect
- Spritz bottle filled with Isopropyl alcohol (rubbing alcohol)
- Whatever scent you're using
- Cheese grater (use a dedicated cheap hand-held one, not your prized Moulinex!)

What you're doing:

1. Prepare the bar molds by coating with oil or lining with cling film. In separate bowls, melt the transparent soap base, then add color and scent. Fill the bar molds until you have a bar for each color you want to use in the final result. Spritz the surface with isoprop. Freeze for an hour, then unmold (carefully!) and cut into pieces. You can chop them into rough geometrics or you can get really artistic and make flowers, fruits, etc.
2. Add enough oil to the bottom of the mold to act as a light adhesive, then set the pieces into the large bar mold, making sure to leave gaps all the way around them.
3. Grate up enough opaque soap to fill the large mold into a metal bowl. Add just enough moisture (water, coconut milk, goat's milk, oil, herbal-infused water or oil, aloe gel, etc) to the soap to wet it - only just enough! Set the bowl over water held at a strong simmer and continuously stir smoothly and gently with a wooden spoon, adding just enough liquid as required to prevent it from drying out. Don't stir too vigorously or there'll be a lathery mess and don't let it stick to the sides or the bottom. When it's all translucent, add your color (if using) and scent (match or complement the fragrance already in use).
4. This is the tricky part: generously spritz the clear pieces (get full coverage!) with isoprop, then pack the opaque soap mixture down in between the pieces of clear soap. You need to get full coverage in between them. You can shift and move the clear pieces a bit to help with that. Don't worry about getting it on top, you can slice that off afterward.
5. Let sit for 24 hours then unmold and allow to dry for a week or two. Gorgeous!
6. For a mass-production version, use a 5lb mold, lay the clear base in strips and layers, then slice the bars afterward for the stained glass effect.

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Cool Soap Project #7: No-Mess Travel Soap

When at the gym or away for a weekend, the soap is always a problem: in a plastic bag? In a box? And what about when it's all wet? Guaranteed, by the end of your trip, your soap has been abandoned. Here's the solution: a soap nicely contained in a deodorant-type push-up container so only the bare minimum of surface is exposed to water!

What you'll need:

- Soap or Melt-and-pour soap base
- Push-up container, such as a well-cleaned empty deodorant container
- Cooking spray or oil
- Spritz bottle filled with Isopropyl alcohol (rubbing alcohol)
- Fragrance and colorant

What you'll be doing:

1. Give the inside of the container a light coating with the oil or cooking spray.
2. Melt the soap base in your microwave or follow the directions for rebatching soap . Add fragrance and colorant (if you're using them).
3. Pour or pack into container and let harden overnight. Add a nice label to identify it as yours, because everybody who sees it is going to want one!
4. To use: remove cap and twist up until the soap is just slightly above the edge of the container. Rub on the relevant areas or on a washcloth and proceed as usual.

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Cool Soap Project #8: Loofah Soap

This one's a classic

What you'll need:

- Cold Process soap recipe or Melt-and-pour soap base (either clear or opaque)
- Tuna tins or cut sections of PVC pipe (about 3 or 4 inches longer than the end cap- enough so you can get a good grip when it's time to pull off the end cap) with the end caps
- Cooking spray, oil, or parchment paper
- Loofah, sized to fit comfortably inside the pipe or tin

What you'll be doing:

1. Give the inside of the tins or pipes and end caps a good coating with the oil or cooking spray or fit inside with parchment paper (a dab of grease will hold it in position).
2. Slice the loofah and trim to fit inside the pipe section or tin.
3. Melt the soap base in your microwave or make your soap recipe to a *light* trace. Add fragrance and colorant (if you're using them).
4. Pour the soap over the loofah until it's about 1/4 way full. Give it a good, long, solid series of taps because there will be a *lot* of air bubbles in there. If a film develops, give it a good spritz with isoprop before you pour the next layer to about half, then repeat the tapping, jiggling, and banging (don't let it pop up and burn you!). Continue to just slightly above the level of the loofah and give it a final banging/tapping/jiggling. If you're using clear soap base, spritz the surface with alcohol.
5. Let sit for 24hrs and remove from molds. This can be tricky!

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Cool Soap Project #9: Ice Cream Soap Cones!

While you can't eat them, these look good enough to want to!

What you'll need:

- Melt-and-pour transparent soap base
- Candy-colored colorants
- Opaque soap for the ice cream cone plus any colorant needed
- Silicone ice cream cone molds
- Silicone ice cream scoop molds
- Silicone miniature candy molds
- Cooking spray or oil
- Spray bottle with isopropyl alcohol
- Scent for the ice cream scoop and for the cone (if you really want to get ambitious, you can also scent the candies)

What you'll be doing:

1. Prepare the molds according to manufacturer instructions.
2. Melt enough soap base to fill the candy molds in your microwave. Divide among bowls and color each a vivid candy color (add fragrance if you're using it). Pour into candy molds and set aside until hard.
3. Melt enough clear base to fill ice cream scoop molds. Add fragrance (if using) and tint lightly (if desired). Pour about 1/4" layer in bottom of ice cream scoop molds, then let sit until a film forms. Set a candy or two (whatever fits without touching the sides) and let sit a few minutes. Spray generously with isoprop and pour more clear soap just to cover the candies (remelt if necessary). Repeat as there is room until the mold is full. Let harden.
4. Grate up enough opaque soap to fill the ice cream molds into a metal bowl. Add just enough moisture (water, coconut milk, goat's milk, oil, herbal-infused water or oil, aloe gel, etc) to the soap to wet it - only just enough! Set the bowl over water held at a strong simmer and continuously stir smoothly and gently with a wooden spoon, adding just enough liquid as required to prevent it from drying out. Don't stir too vigorously or there'll be a lathery mess and don't let it stick to the sides or the bottom. When it's all translucent, add your color (if using) and scent (match or complement the fragrance already in use).
5. Fill the ice cream cone molds and set aside to harden.
6. Once the cones are hard, melt transparent soap base; spritz both the bottom of the scoops and the tops of the cones generously with isoprop, dip the top of the cone in the melted

soap, and cap off with the scoop to form a full ice cream cone. Hold until set, then set aside or back in cone mold to dry.

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Cool Soap Project #10: Soapsicles

Are your little ones tired of trying to keep a grip on the soap? Are you? Or perhaps you've been looking for a way to dry the soap out without that big gloopy buildup?

What you'll need:

- Melt-and-pour soap base, clear, opaque, or a combination
- Colorants
- Scent (if desired)
- Silicone popsicle molds
- Wooden popsicle sticks
- Cooking spray or oil
- Spray bottle with isopropyl alcohol

What you'll be doing:

1. Prepare the molds by coating with oil or spraying with cooking spray
2. Melt enough soap base in your microwave to fill the molds. Divide among bowls and add color and scent (unless they're all going to be the same). Fill popsicle molds, spritz the surface with isoprop and set aside until a skin forms.
3. Spray the sticks with isoprop and insert into the soap using the skin to hold it upright. Alternatively, you can use cling film to hold the sticks in position.
4. Let harden, remove, and enjoy (in the bath!)!

Ideas:

- Layer different colors to make creamsicle, rocket, or rainbow popsicles
- Use clear base and suspend a shell, "slice of fruit" soap, colored soap chips, or dried herbs throughout.
- Color using mica for a nice swirly glitter effect.
- Drill a hole in the stick and run a string or cord through to make it easy to hang up and dry out between uses.

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Beneficial Additives by Category

Anti-Aging

- Argon oil

- visibly reduces wrinkles, tightens the skin, and protects skin's elasticity; restarts vital cell functions to promote regeneration and slow down the signs of aging

- Avocado

- some say it can regenerate cells and treat conditions such as eczema, psoriasis, sun damage, dry and aged skin, and is excellent for sensitive skin

- Borage oil and powder

- good for psoriasis, eczema, stimulating skin cells, repairing damage from aging

- Calendula extract

- anti-viral, anti-inflammatory; soothes irritated skin; helpful to reverse damage from toxins and aging

- Carrot oil

slows premature aging; good for treating itching, dryness, psoriasis and eczema; reduces scarring

- Emu

effective for slowing signs of aging and for psoriasis, dermatitis, and eczema; mix in at light trace, don't go higher than 10% of total recipe

- Flax oil

used to treat eczema, psoriasis, burns, etc; promotes cell regeneration; anti-inflammatory

- Goat's milk

works as a light chemical exfoliant, rather than a physical one; restores and rejuvenates dry, aging skin; signs and symptoms of milk allergy include wheezing, vomiting, hives and digestive problems. Rarely, milk allergy can cause anaphylaxis — a severe, life-threatening reaction; label explicitly

- Grapefruit

invigorating citrus scent which can help with headaches and fatigue; antiseptic and disinfectant properties; helps reverse damage from free radicals; topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later

- Jojoba

best for dry, mature or aging skin, wrinkles, and break-outs; also anti-inflammatory

- Neem Oil

moisturizes; soothes itching, irritated skin; reduces redness; improves general skin tone; antibacterial; said to be helpful against acne, eczema, and psoriasis

- Palmarosa

useful against acne; minimizes scarring through improved tissue regeneration; antifungal; useful against athlete's foot and other fungal infections, as well as eczema

- Rosehip Seed oil and powder

helps minimize fine wrinkles around eyes and mouth, scarring, burns, sun damage, and stretch marks

- Wheat Germ oil

reportedly promotes skin regeneration; softens and reduces the appearance of scar tissue and stretch marks; promotes circulation; helps repair sun damage; relieves dermatitis and eczema

Antibacterial/Antifungal/Antiseptic/Anti-viral:

- Basil
- Beeswax

has emollient and humectant, promotes cell development and healing, antiseptic

- Bergamot oil

antiseptic; useful against acne and skin conditions such as psoriasis and eczema

- Burdock Leaf

avoid use if allergic to ragweed; may cause contact dermatitis - infuse the leaves and root to help with infectious and chronic inflammatory conditions including eczema and acne; some consider it antimicrobial and anti-inflammatory

- Calendula extract

anti-viral, anti-inflammatory; soothes irritated skin; helpful to reverse damage from toxins and aging

- Geranium

antimicrobial, anti-inflammatory, mood stabilizer, analgesic, may help heal burns and wounds, enhances mood; may cause contact rash and irritation

- Goldenrod

antiseptic, antibacterial; helps with acne

- Grapefruit

invigorating citrus scent which can help with headaches and fatigue; antiseptic and disinfectant properties; helps reverse damage from free radicals; topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly

- Lavender

anti-inflammatory; useful for treating cuts, burns, eczema, sunburn, insect bites, migraine, and rashes; soothing, calming effect on moods; promotes sleep; safe for use on children

- Lemon

refreshing citrus scent invigorates and combats fatigue, relieves headache; antiseptic; combats damage from free radicals; useful against acne; topical reactions in sensitive individuals include

red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly

- Lemongrass

combats fatigue; antiseptic; useful against acne

- Neem Oil

moisturizes; soothes itching, irritated skin; reduces redness; improves general skin tone; antibacterial; said to be helpful against acne, eczema, and psoriasis

- Olive leaf

used to treat minor burns, psoriasis, stretch marks due to pregnancy, and sunburn; slight risk of contact rash or dermatitis

- Oolong tea

used to treat eczema

- Orange

sweet; antiseptic and disinfectant; topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly

- Palmarosa

useful against acne; minimizes scarring through improved tissue regeneration; antifungal; useful against athlete's foot and other fungal infections, as well as eczema

- Parsley

used to treat cracked or chapped skin, bruises, insect bites, lice, and parasites; may cause sun sensitivity and rash

- Patchouli

antifungal; antibacterial; useful to treat dandruff, insect bites, athlete's foot, dermatitis

- Peppermint

useful against headaches and nausea; helps open up airways; antibacterial; improves circulation; therapeutic use not recommended for pregnancy or children under seven; small possibility of respiratory or dermal reaction when used in soap

- Pine

anti-inflammatory; bronchodilator, so useful for coughs and asthma

- Sage

used to treat skin irritation

- Tea Tree

antiseptic, antibacterial, antifungal, and repels pests such as head lice; useful to treat rashes, acne, dermatitis, insect bites, etc

Astringent

- Chamomile

rarely, can trigger allergic eczema, eye irritation, and hay fever symptoms in individuals who are allergic to related plants in the daisy family; avoid for individuals who are allergic to celery, ragweed, daisies, marigolds, or chrysanthemums

- Evening Primrose oil
- Rosemary oil and powder

Calming/Soothing/Relaxing

- Chamomile

rarely, can trigger allergic eczema, eye irritation, and hay fever symptoms in individuals who are allergic to related plants in the daisy family; avoid for individuals who are allergic to celery, ragweed, daisies, marigolds, or chrysanthemums

- Clay, Kaolin

mix with warmed oils, use 1 tsp to 1 tbsp per pound of oils

- Honey

use sparingly, as it softens soap

- Geranium

antimicrobial, anti-inflammatory, mood stabilizer, analgesic, may help heal burns and wounds, enhances mood; may cause contact rash and irritation

- Lavender

anti-inflammatory; useful for treating cuts, burns, eczema, sunburn, insect bites, migraine, and rashes; soothing, calming effect on moods; promotes sleep; safe for use on children

- Melissa

light citrus scent calms, soothes, and relieves stress; topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly

- Rosemary oil and powder

Cleansing

- Powdered Milk

use sparingly, as it softens soap; label explicitly

- Coconut Oil

Exfoliating

- Almond meal
- Apricot kernel, ground
- Coffee
- Corn meal
- Cranberry seeds
- Goat's milk

works as a light chemical exfoliant, rather than a physical one; restores and rejuvenates dry, aging skin; signs and symptoms of milk allergy include wheezing, vomiting, hives and digestive problems. Rarely, milk allergy can cause anaphylaxis — a severe, life-threatening reaction; label explicitly

- Oatmeal (chopped or crushed)
- Poppy seeds
- Raspberry seeds
- Salt
- Sugar

Healing

- Aloe Vera Gel

particularly effective on dry or burned skin; add up to 1/2 cup per 5 lb batch of soap.

- Apricot Kernel oil

particularly beneficial for aged , inflamed and dry skin

- Avocado

some say it can regenerate cells and treat conditions such as eczema, psoriasis, sun damage, dry and aged skin, and is excellent for sensitive skin

- Bergamot oil

antiseptic; useful against acne and skin conditions such as psoriasis and eczema

- Borage oil and powder

good for psoriasis, eczema, stimulating skin cells, repairing damage from aging

- Calendula extract

anti-viral, anti-inflammatory; soothes irritated skin; helpful to reverse damage from toxins and aging

- Carrot oil

slows premature aging; good for treating itching, dryness, psoriasis and eczema; reduces scarring

- Cinnamon

use for infections, coughs, colds, flu, arthritis, rheumatism; may cause eczema, irritation and blistering

- Comfrey leaf

appears to be anti-inflammatory, be cautious if taking anti-inflammatory medications as the anti-inflammatory in Comfrey can be absorbed through the skin and increase the dose in your blood

- Emu

effective for slowing signs of aging and for psoriasis, dermatitis, and eczema; mix in at light trace, don't go higher than 10% of total recipe

- Evening Primrose oil

best for dry, flaky skin, eczema, and psoriasis

- Flax oil

used to treat eczema, psoriasis, burns, etc; promotes cell regeneration; anti-inflammatory

- Frankincense

useful to heal skin diseases or disorders and promote circulation

- Geranium

antimicrobial, anti-inflammatory, mood stabilizer, analgesic, may help heal burns and wounds, enhances mood; may cause contact rash and irritation

- Goat's milk

works as a light chemical exfoliant, rather than a physical one; restores and rejuvenates dry, aging skin; signs and symptoms of milk allergy include wheezing, vomiting, hives and digestive problems. Rarely, milk allergy can cause anaphylaxis — a severe, life-threatening reaction; label explicitly

- Grapefruit

invigorating citrus scent which can help with headaches and fatigue; antiseptic and disinfectant properties; helps reverse damage from free radicals

- Hemp Oil

moisturizing, good for treating dry skin & minor burns

- Jojoba

best for dry, mature or aging skin, wrinkles, and break-outs; also anti-inflammatory

- Kukui nut oil

use for sunburned and chapped skin, acne, eczema, and psoriasis

- Lavender

anti-inflammatory; useful for treating cuts, burns, eczema, sunburn, insect bites, migraine, and rashes; soothing, calming effect on moods; promotes sleep; safe for use on children over three months of age

- Lemon

refreshing citrus scent invigorates and combats fatigue, relieves headache; antiseptic; combats damage from free radicals; useful against acne; topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly

- Lemongrass

combats fatigue; antiseptic; useful against acne

- Neem Oil

moisturizes; soothes itching, irritated skin; reduces redness; improves general skin tone; antibacterial; said to be helpful against acne, eczema, and psoriasis

- Oatmeal (colloidal)

soothes dry, irritated skin; useful to treat itching from dermatitis, chicken pox, insect bites, allergic reaction, etc

- Olive leaf

used to treat minor burns, psoriasis, stretch marks due to pregnancy, and sunburn; slight risk of contact rash or dermatitis

- Palmarosa

useful against acne; minimizes scarring through improved tissue regeneration; antifungal; useful against athlete's foot and other fungal infections, as well as eczema

- Parsley

used to treat cracked or chapped skin, bruises, insect bites, lice, and parasites; may cause sun sensitivity and rash

- Patchouli

antifungal; antibacterial; useful to treat dandruff, insect bites, athlete's foot, dermatitis

- Peppermint

useful against headaches and nausea; helps open up airways; antibacterial; improves circulation; therapeutic use not recommended for pregnancy or children under seven; small possibility of respiratory or dermal reaction when used in soap

- Pine

anti-inflammatory; bronchodilator, so useful for coughs and asthma

- Rosehip seed oil and powder

helps minimize fine wrinkles around eyes and mouth, scarring, burns, sun damage, and stretch marks

- Sage

used to treat skin irritation; may cause skin rash, intense itching, and redness; label explicitly

- Tea Tree

antiseptic, antibacterial, antifungal, and repels pests such as head lice; useful to treat rashes, acne, dermatitis, insect bites, etc

- Wheat Germ oil

reportedly promotes skin regeneration; softens and reduces the appearance of scar tissue and stretch marks; promotes circulation; helps repair sun damage; relieves dermatitis and eczema

Lubricating (such as for shaving soaps)

- Clay - Glacial, Kaolin, or Bentonite

lets the razor glide smoothly over the skin; mix with warmed oils, use 1 tsp to 1 tbsp per pound of oils

Moisturizing

- Avocado

- Beeswax

has emollient and humectant, promotes cell development and healing, antiseptic

- Castor Oil

humectant; 1/2 to 1 ounce per pound of oils

- Cocoa Butter

about 1-1/2 oz per pound of soap

- Coconut Oil
- Emu

Mix in at light trace, don't go higher than 10% of total recipe

- Geranium

corrects dry skin; useful to normalize oily skin

- Goat's milk

works as a light chemical exfoliant, rather than a physical one; restores and rejuvenates dry, aging skin; signs and symptoms of milk allergy include wheezing, vomiting, hives and digestive problems. Rarely, milk allergy can cause anaphylaxis — a severe, life-threatening reaction; label explicitly

- Glycerin

humectant

- Hemp Oil

moisturizing, good for treating dry skin & minor burns

- Jojoba oil
- Macadamia Nut oil

emollient - use sparingly, as it will overpower other oils; especially beneficial to aging or dry skin

- Neem Oil

moisturizes; soothes itching, irritated skin; reduces redness; improves general skin tone; antibacterial; said to be helpful against acne, eczema, and psoriasis

- Palm Kernel Oil

lathers beautifully; moisturizes; use sparingly; as too much can be drying and it hardens the soap

- Safflower Oil
- Shea Butter

3 - 7% for superfatting purposes

- Sunflower Oil
- Sweet Almond oil

Oily Skin

- Almond meal
- Clay - Glacial or Bentonite

absorbs excess oil from the skin;mix with warmed oils, use 1 tsp to 1 tbsp per pound of oils

- Geranium

corrects dry skin; useful to normalize oily skin

Preservative

- Vitamin E
- Sunflower Oil

Refreshing

- Chamomile

rarely, can trigger allergic eczema, eye irritation, and hay fever symptoms in individuals who are allergic to related plants in the daisy family; avoid for individuals who are allergic to celery, ragweed, daisies, marigolds, or chrysanthemums

- Eucalyptus

Richer Lather

- Castor Oil

1/2 to 1 ounce per pound of oils

- Coconut Oil
- Palm Kernel Oil

lathers beautifully; moisturizes; use sparingly; as too much can be drying and it hardens the soap

- Sugar

Scarring and Stretch marks

- Borage

good for psoriasis, eczema, stimulating skin cells, repairing damage from aging

- Carrot oil

slows premature aging; good for treating itching, dryness, psoriasis and eczema; reduces scarring

- Flax oil

used to treat eczema, psoriasis, burns, etc; promotes cell regeneration; anti-inflammatory

- Rosehip seed oil and powder

helps minimize fine wrinkles around eyes and mouth, scarring, burns, sun damage, and stretch marks

- Palmarosa

useful against acne; minimizes scarring through improved tissue regeneration; antifungal; useful against athlete's foot and other fungal infections, as well as eczema

- Wheat Germ oil

reportedly promotes skin regeneration; softens and reduces the appearance of scar tissue and stretch marks; promotes circulation; helps repair sun damage; relieves dermatitis and eczema

Softener

- Rice Bran oil

suitable for baby products

Stress reliever

- Aniseed
- Cinnamon

use sparingly, it can irritate the skin if used in large amounts; may cause eczema, irritation and blistering

- Lavender

useful for treating cuts, burns, eczema, sunburn, insect bites, migraine, and rashes; soothing, calming effect on moods; promotes sleep; safe for use on children

- Melissa

topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly

Stimulant

- Cloves
- Cinnamon

use sparingly, it can irritate the skin if used in large amounts; may cause eczema, irritation and blistering

- Eucalyptus
- Frankincense

useful to heal skin diseases or disorders and promote circulation

- Grapefruit

invigorating citrus scent which can help with headaches and fatigue; antiseptic and disinfectant properties; helps reverse damage from free radicals; topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly

- Lemon

refreshing citrus scent invigorates and combats fatigue, relieves headache; antiseptic; combats damage from free radicals; useful against acne; topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly

- Lemongrass

combats fatigue; antiseptic; useful against acne)

- Lime

zesty, refreshing citrus scent combats fatigue, improves mood; topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly

Texture

- Silk powder

about .0125 of an ounce per pound of oils

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Scents Organized by Mood

The reason scent has such an impact on us is that, unlike every other sense, scent does not need to be processed - it's fired straight through to the brain. When you get a whiff of something, the scent is picked up by your olfactory receptor neurons. These send a message through receptor bulbs, which are at the back of the nose, and the receptor bulbs will activate part of your brain. The part of the brain that is stimulated recalls stored memories, which influences your mood and even your conscious thought.

As an example, take a whiff of cinnamon - what is the first thing that pops into your mind: something nice, like the best Christmas when you were a child or your favorite teacher in third grade? Maybe something not so nice, like the time your dad gave you Cinnamon Heart Valentine candies and then laughed when you cried because of the burning (and you've never liked cinnamon since)?

The sense of smell is by far the most powerful and also the most delicate. Victims of Alzheimer's lose their sense of smell first and those suffering from depression find that nothing smells or tastes right. Without smell, food has no flavor. In those with cognitive dementia, a scent can often retrieve memories long-forgotten since they were a child.

Pleasant aromas encourage us to linger while unpleasant aromas encourage us not to hang around, even if the level of scent is so low as to not be consciously detectable.

Aromatherapy, or the art of using scent for healing has been around for thousands of years. Records from the ancient Egyptians show that six millenia ago, scented oils chosen for massage, medicines, cosmetics, and perfumes were influenced by their emotional and/or mental impact.

The following is a fairly comprehensive list of scents organized by effect for your convenience. Don't be shy to blend them, either.

Combat Anger/Negativity

- Basil
- Bergamot
- Chamomile
- Frankincense
- Geranium
- Grapefruit
- Jasmine
- Lemon
- Lily of the Valley
- Myrrh
- Orange
- Patchouli
- Rose
- Sweet Melissa
- Ylang-ylang.

Ease Anxiety

- Bergamot

- Cedarwood
- Cypress
- Frankincense
- Ginger
- Hyssop
- Lavender
- Marjoram
- Myrrh
- Neroli
- Orange
- Peach
- Rose
- Rose Geranium
- Violet Leaf

"After a bad car accident, my little one was in the hospital for over a week. She was so scared. Doctors wanted to put her on sedatives but I don't believe that young children should be exposed to mood-altering substances. I believe the worst part of any hospital is the smell - it's terrible and very threatening to me, so I can only imagine how much worse for a child. Nurses would not allow me to install air fresheners or burn incense to try and mask the odor of chemicals and sickness. Instead, I cut a small piece of her favorite bath time soap - it's peach vanilla, hand made from all natural ingredients; I buy it from my spa - and I put it inside her favorite teddy bear. That way, whenever she was feeling frightened or lonely, she could rest her head on her teddy bear to smell it and feel like she was back home."
- Carol J, Dayton, OH

Boost Confidence/Assertiveness/Self-Esteem/Self-Image

- Bay
- Bay Laurel
- Basil
- Cedarwood
- Cypress
- Fennel
- Frankincense
- Geranium
- Ginger
- Grapefruit
- Hyacinth
- Jasmine
- Lavender
- Lemon
- Lily of the Valley
- Lime
- Melissa
- Neroli
- Nutmeg
- Orange

- Patchouli
- Pine
- Sandalwood
- Sweet Melissa
- Ylang-Ylang

Ease Depression/Promotes Happiness and Joy

- Bergamot
- Cinnamon
- Chocolate
- Clary Sage
- Cloves
- Frankincense
- Geranium
- Ginger
- Grapefruit
- Jasmine
- Lavender
- Lemon
- Lemongrass
- Lemon Balm
- Lemon Verbena
- Neroli
- Orange
- Petitgrain
- Rose
- Rose Geranium
- Sandalwood
- Tangerine
- Ylang-ylang

Enhance Creativity/Inspiration

- Bergamot
- Cloves
- Frankincense
- Jasmine
- Lemon
- Neroli
- Rose

Improve Memory/Mental Focus/Concentration

- Bay Laurel
- Basil
- Bergamot
- Chamomile
- Cinnamon
- Coffee
- Cypress

- Fennel
- Frankincense
- Jasmine
- Lavender
- Lemon
- Lemongrass
- Licorice
- Orange
- Rosemary
- Thyme

Ease Sorrow

- Clary Sage
- Cypress
- Fir
- Marjoram
- Rosemary
- Sage

Enhance Contentment/Peace/Self-Awareness

- Bergamot
- Chamomile
- Chocolate
- Cloves
- Coriander
- Cypress
- Frankincense
- Jasmine
- Juniper
- Lavender
- Marjoram
- Melissa
- Neroli
- Orange
- Sage
- Sandalwood
- Yarrow
- Ylang-Ylang

Pain Relief

- Geranium
- Peppermint
- Sage
- Tea Tree

Promotes Passion/Sensuality

- Chocolate
- Cinnamon
- Jasmine
- Lavender
- Musk
- Patchouli
- Pumpkin
- Rose
- Sandalwood
- Tuberose
- Vanilla
- Ylang-ylang

Invigorating/Energizing/Enhances Performance

- Anjelica
- Basil
- Bay
- Benzoin
- Bergamot
- Black Pepper
- Camphor
- Cardamom
- Cinnamon
- Cloves
- Coffee
- Cypress
- Eucalyptus
- Fennel
- Frankincense
- Ginger
- Grapefruit
- Jasmine
- Lavender
- Lemon
- Licorice
- Orange
- Peppermint
- Pine
- Rosemary
- Sage
- Spiced Apple

Soothing/Relaxing/Sleep-enhancing

- Bergamot
- Chamomile
- Cinnamon

- Chocolate
- Cloves
- Frankincense
- Geranium
- Jasmine
- Lavender
- Lemon
- Lily of the Valley
- Marjoram
- Myrrh
- Neroli
- Nutmeg
- Orange
- Peppermint
- Petitgrain
- Pine
- Rose
- Rose Geranium
- Sage
- Sandalwood
- Spiced Apple
- Sweet Melissa
- Tea Tree
- Valerian
- Vanilla
- Violet
- Ylang-ylang

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Natural Colorants for Soap grouped by Color

Just because something is "natural" doesn't mean it's perfectly safe - arsenic is natural. Before you commit to a particular colorant, make sure you know it's not a common allergen, that it's not a skin irritant, and that any odor is either not too overpowering and is pleasant or at least isn't going to override the rest of the recipe.

Reds and Pinks

- Alkanet Root - Pink/Red to Purple

- no known toxicity but may cause contact allergic reaction - Infuse 2-1/2 tbsp per pound olive oil

- Beet Root - Pink to Red

- no known toxicity but there are reports of allergic reaction when used as food coloring - Infuse 1 tbsp in 2 ounces of oil

- Cochineal Powder - Deep Red

- known to cause severe allergic reactions when used as food dye, must be explicitly listed on the label - Made from insects and is not considered vegan

- Hibiscus - Red Lady's Bedstraw - Coral Pink

- hay fever-like allergic reactions, possible mild anaphylaxis when consumed as a tea - Use the roots

- Madder Root - Pink to Rich Red

- Unsafe when ingested (May cause cancer, birth defects, and miscarriages, turns urine, tears, and breast milk red) but no reported problems when used as soap dye; label explicitly - Add 1 tbsp per pound soap at light trace

- Morroccan Red Clay - Brick Red

- no known health problems - Very stable, add 1-3 tbsp per pound of soap

- Pink Clay - Muted Pink

- no known health problems

- Rattanjot - Red to Purple

- no reported health problems - Infuse 1 tsp in 2 ounces of oil

- Red Cabbage - Rose

- no known health problems from contact, can cause severe allergic reaction if ingested - Can add unpleasant scent

- Red Palm Oil - Pink to Orange Red

- can cause hay fever-like symptoms and (rarely) anaphylaxis

"I went to a lot of trouble and expense to renovate our old, dated, dysfunctional, and just plain ugly bathroom. We like deep, rich, saturated colors so we went with ruby red, chocolate brown, and copper and yeah, maybe OCD or whatever but those bright white bars of soap were driving me crazy! They just really ruined the look because all you're staring at is these bright white bricks just there in your face. My cousin sells soap at the farmer's market and she said she could do something and it took a few tries but she came up with the perfect soap to match my bathroom! It's a rich red and has a bit of sparkle to it so it ties in perfectly with everything else in the bathroom. It smells nice, too, and really makes my skin soft. It's got olive oil or something I think she said."

- Deborah M, Washington, DC

- Reef Clay - Deep Red

- no known health problems

- Red Sandalwood - Maroon

- no reported health problems - Add ½ to 1 tsp per pound of soap at light trace. Lower pH yields red and higher pH makes purple

- Rose Hip Powder - Pink to Burgundy

- when ingested, can cause reactions such as nausea, vomiting, diarrhea, constipation, heartburn, stomach cramps, fatigue, headache, inability to sleep, and others, while inhaling powder can

cause an allergic reaction in some people; no known contact issues - Add at light trace

- Rose Pink Clay - Brick Red

- no known health problems - Add 1-3 tbsp per pound of soap

- Sorrel - Soft Pink

- no reported health concerns used topically; may cause kidney stones if ingested; can cause hay fever-like symptoms if inhaled - Use the roots

- St John's Wort Flowers - Red

- when ingested, can cause anaphylaxis, increased skin sensitivity to sunlight, rash, constipation; no known problems used topically - Infuse flowers

- Tomato Puree - Red to Orange

- used topically can cause skin rash, eczema, or hives (urticaria), abdominal cramps, nausea, vomiting, or diarrhea, an itching sensation in the throat, hay fever like symptoms, swelling of the face, mouth, tongue, or throat (angiodema), or anaphylaxis (very rarely); label explicitly

Oranges and Peaches

- Annatto Seed - Orange to Yellow

- during a study in 1978, half of study participants reacted to annatto used as food coloring; no known problems when used topically - Infuse 2 tsp per pound oil

- Butterfly Bush Flowers - Orange to Gold

- can cause hay-fever like symptoms, no known issues when used topically - Infuse flowers

- Carrot Powder - Orange

- may cause reaction in individuals allergic to fennel, celery, mugwort or birch; label explicitly - Add 1-3 tbsp per pound of soap at light trace

- Dahlia - Orange to Yellow

- rarely, may cause contact dermatitis - Infuse

- Mace Powder - Orange

- may cause eczema or dermatitis in sensitive individuals - Infuse 1 tbsp in 2 ounces of oil

- Milks - Orange/Yellow/Brown

- signs and symptoms of milk allergy include wheezing, vomiting, hives and digestive problems. Rarely, milk allergy can cause anaphylaxis — a severe, life-threatening reaction; label explicitly - Add lye to milk instead of water

- Orange Peel Powder - Orange

- topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly - Add 1-3 tbsp per pound of soap at light trace

- Pansy Herb Tea - Orange

- recommended as a nontoxic treatment for seborrheic dermatitis, especially in infants; no adverse reactions known

- Paprika - Peach/ Salmon

- individuals with latex allergy can also react to paprika; ingestion causes hay fever like symptoms and rare anaphylaxis; also can cause contact dermatitis and hives; label explicitly - Infuse ½ to 1 tsp per pound oil

- Pumpkin/Sweet Potato Puree - Deep Orange

- contact with pumpkin can cause dermatitis or hives in sensitive individuals, inhaling the vapors from cooking pumpkin cause also cause symptoms; sweet potato allergy can cause facial swelling, tongue inflammation, skin rash, itching, abdominal pain, nausea, vomiting, and rare anaphylaxis - Add 1-3 tbsp per pound of soap

- Safflower Petals - Orange to Yellow

- avoid in cases of allergy to ragweed, chrysanthemums, marigolds, daisies, and other in the Asteraceae family; label explicitly - Infuse/ Petals retain color

- Sweet Orange Oil - Orange

- topical reactions in sensitive individuals include red, itchy skin that forms a rash, which may raise bumps or blisters filled with fluid that may appear hours or days later; label explicitly - Add to scent and color soap at light trace

- Tomato Puree - Red to Orange

- used topically can cause skin rash, eczema, or hives (urticaria), abdominal cramps, nausea, vomiting, or diarrhea, an itching sensation in the throat, hay fever like symptoms, swelling of the face, mouth, tongue, or throat (angiodema), or anaphylaxis (very rarely); label explicitly

- Tumeric - Orange/Gold

- individuals with a history of allergic reaction to organic coloring agents, particularly yellow colors containing curcumin, are very likely allergic to turmeric and, by extension, ginger; label explicity - Add to oils or infuse

- Wheat Germ - Yellow Orange

- wheat allergy is the most common food allergy in north america; label explicitly

"I love yellow - it's an instant pick-me-up and nothing wakes me up in the morning like the hand made lemon-poppyseed soap I buy from the local health store. The color is so vibrant and the smell really gives me a burst of energy - on cold, cloudy days, it's like I have a little sun right inside my bathroom! The poppyseed gives me just the right texture - I have dry, itchy skin so the poppyseed takes off the flakes while the moisturizers she added at my request really help keep my eczema under control."

- Lydia F., Chicago, IL

Yellows and Golds

- Acacia Flowers - Maize Yellow

- reports of cross-reaction to acacia in individuals who were allergic to rye grass and cultivated rye; label explicitly - Infuse flowers

- Annatto Seed - Yellow to Orange

- during a study in 1978, half of study participants reacted to annatto used as food coloring; no known problems when used topically - Infuse ¼ tsp in 2 ounces oil

- Black-Eyed Susan - Yellow

- can cause hay fever symptoms - Mix petals in lye solution

- Calendula Flowers - Buttery Yellow

- generally regarded as safe - Infuse 1 tbsp in 2 ounces of oil or add ¼ cup petals per pound of soap at trace

- Chamomile - Yellow/Gold

- rarely, can trigger allergic eczema, eye irritation, and hay fever symptoms in individuals who are allergic to related plants in the daisy family; avoid for individuals who are allergic to celery, ragweed, daisies, marigolds, or chrysanthemums; - Infuse 1 tbsp in 2 ounces of oil

- Dahlia - Intense Yellow

- rarely, may cause contact dermatitis - Infuse

- Elderberry Leaves - Yellow

- can cause several different types of allergic reactions, including skin irritation and rash - Infuse

- Fennel - Yellow

- individuals who are allergic to celery, carrot, and mugwort are more likely to also be allergic to fennel; fennel can make skin extra sensitive to sunlight and easier burn

- Ginger Root - Yellow

- individuals with a history of allergic reaction to organic coloring agents, particularly yellow colors containing curcumin, are very likely allergic to turmeric and, by extension, ginger; label explicity - Infuse

- Goldenrod Flowers - Muted Yellow

- unlikely chance of contact dermatitis - Infuse

- Ground Mustard - Yellow

- as one of the top 14 allergens in North America, mustard must be explicitly labeled; allergic reactions to mustard seed include: anaphylaxis, angioedema, urticaria, asthma, dyspnoea, scalp, genital and nasal itching; sneezing, vomiting; avoid in individuals allergic to Canola and members of the Brassicaceae family, including broccoli, cauliflower, cabbage, Brussel sprouts, turnip, and rapeseed

- Milks - Orange/Yellow/Brown

- signs and symptoms of milk allergy include wheezing, vomiting, hives and digestive problems. Rarely, milk allergy can cause anaphylaxis — a severe, life-threatening reaction; label explicitly - Add lye to milk instead of water

- Red Palm Oil - Creamy Yellow to Gold

- can cause hay fever-like symptoms and (rarely) anaphylaxis - Use 1% for creamy yellow and 15% for gold

- Safflower Powder - Yellow

- avoid in cases of allergy to ragweed, chrysanthemums, marigolds, daisies, and other in the Asteraceae family; label explicitly - Add 1-2 tsp per pound soap at trace

- Saffron Petals - Warm Yellow

- generally regarded as safe, minimal concerns - Infuse

- St John's Wort Leaves - Yellow

- when ingested, can cause anaphylaxis, increased skin sensitivity to sunlight, rash, constipation; no known problems used topically - Infuse

- Tumeric - Gold

- individuals with a history of allergic reaction to organic coloring agents, particularly yellow colors containing curcumin, are very likely allergic to turmeric and, by extension, ginger; label explicity - Add to oils or infuse 2 tbsp in 2 ounces of oil

- Yellow Clay - Yellow

- no known health problems - Add 1-3 tsp per pound of soap

Greens

- Alfalfa Powder - Pea Soup

- no known topical concerns, although there are serious concerns if ingested; label explicitly - Add 2 tsp per 4-5lb batch soap (Unpleasant scent)

- Blue Green Algae - Green

- can cause rash or hives; label explicitly

- Burdock Leaf - Natural Green

- avoid use if allergic to ragweed; may cause contact dermatitis - infuse the leaves and root to help with infectious and chronic inflammatory conditions including eczema and acne; some consider it antimicrobial and anti-inflammatory; label explicitly

- Chlorella - Green Chlorophyll (Liquid) - Light Green

- allergic reaction can manifest as redness, itching, hives, a skin rash and swelling of the face and mouth, possible anaphylaxis; label explicitly - Add 1-3 tbsp per pound soap at trace

- Comfrey Leaf - Deep Sage Green

- appears to be anti-inflammatory, be cautious if taking anti-inflammatory medications as the anti-inflammatory in Comfrey can be absorbed through the skin and increase the dose in your blood; label explicitly - Add 1 tbsp per pound soap at trace

- Cucumber - Pale Green

- may cause itching and rash, although high heat is said to deactivate the offending protein; label explicitly

- Dandelion Leaf - Green

- individuals with ragweed or latex allergy may react to dandelion; label explicitly - Add 1-2 tbsp per pound soap at trace

- Dill - Green French

- individuals allergic to fennel, coriander, caraway, and aniseed may react to dill, causing rash and hives; label explicitly

- Green Clay - Green

- no known health concerns - Add 1-3 tbsp per pound soap at trace

- Kelp - Dark Green

- allergic reaction can manifest as redness, itching, hives, a skin rash and swelling of the face and mouth, possible anaphylaxis; label explicitly - Add 1-3 tbsp per pound soap at trace

- Mugwort - Greenish Gold

- individuals who are allergic to fennel, birch, celery, or carrot may develop contact dermatitis; label explicitly

- Nettle Leaf - Lime Green

- allergic reaction can manifest as redness, itching, hives, and skin rash; label explicitly - Infuse or add 1 tbsp per pound soap at trace

- Olive Leaf - Green

- slight risk of contact rash or dermatitis - Infuse or add 1 tbsp per pound soap at trace

- Parsley - Green

- may cause sun sensitivity and rash - Infuse flakes for better staying powder

- Peppermint - Green

- small possibility of respiratory or dermal reaction when used in soap

- Sage - Green

- may cause skin rash, intense itching, and redness; label explicitly

- Spinach - Green

- generally regarded as safe - Add 1-3 tbsp per pound soap at trace

- Spirulina Moss - Green

- allergic reaction can manifest as redness, itching, hives, a skin rash and swelling of the face and mouth, possible anaphylaxis; label explicitly - Infuse 1-2 tbsp in 2 ounces of oil or add 1-3 tbsp per pound soap at trace

- Stevia Powder - Green

- no record of allergic reaction; Infuse 2 tbsp in 2 ounces of oil

- Ulva Lactica (seaweed) - Sage Green

- allergic reaction can manifest as redness, itching, hives, a skin rash and swelling of the face and mouth, possible anaphylaxis - Infuse 1-2 tbsp in 2 ounces of oil or add 1-3 tbsp per pound soap at trace

Blues and Purples

- Alkanet Root - Pink/Red to Purple

- no known toxicity but may cause contact allergic reaction - Infuse 2-1/2 tbsp per pound olive oil

- Black Mulberry Puree - Dark Bluish Purple

- may cause rash and itching

- Blackberry Puree - Purple Blue

- may cause rash and itching

- Chamomile EO - Robin's Egg Blue

- rarely, can trigger allergic eczema, eye irritation, and hay fever symptoms in individuals who are allergic to related plants in the daisy family; avoid for individuals who are allergic to celery, ragweed, daisies, marigolds, or chrysanthemums; - Add ½ to 2 tsp per pound soap at trace (Will scent)

- Blue Cypress - EO Blue

- may cause hayfever like symptoms - Add ½ to 2 tsp per pound soap at trace (Will scent)

- Blueberry Puree - Blue

- contact rash - Add 1-3 tbsp per pound soap

- Indigo Powder - Blue

- may cause rash and itching - Infuse 2 tsp in 2 ounces of oil or add ¼ to ½ tsp per pound soap

- Purple Grape Juice - Bluish Purple

- generally regarded as safe in soap - Add 1-3 tbsp per pound soap

- Purple Indian Corn - Dark Purple/ Maroon Red

- may cause hay fever-like symptoms or asthma

- Geranium Leaf - Dark Purple to Grey Red

- may cause rash and itching

- Hibiscus - Purple

- hay fever-like allergic reactions, possible mild anaphylaxis when consumed as a tea - Infuse

- Red Sandalwood - Purple

- no reported health problems - Add 3 tbsp per 6 lb soap

- Woad Leaf - Sky Blue

- no reported health problems - Add 1/8 to ½ tsp per 5lb soap

Browns and Tans

- Acacia Flowers - Golden Brown

- reports of cross-reaction to acacia in individuals who were allergic to rye grass and cultivated rye; label explicitly - Infuse flowers

- Bentonite Clay - Beige to Green/Grey

- no known health problems - Add 1-3 tbsp per pound of soap

- Black Walnut Hull - Rich Brown

- can cause severe contact dermatitis - redness, hives, and blisters; label explicitly - Add ¼ to ½ tsp per pound soap at trace

- Cinnamon - Tan to Brown

- may cause eczema, irritation and blistering - Add ½ to 1 tsp per pound soap at trace

- Cloves - Brown

- generally regarded as safe when used topically - Add ¼ to 1 tsp per pound soap at trace

- Cocoa Powder - Dark Brown

- very rare, allergy is usually to a contaminant such as peanut; may cause rash or dermatitis - Add ¼ to 1 tsp per pound soap at trace

- Coffee - Deep Creamy Brown

- can cause rash, dermatitis, or hives (rare) - Use brewed coffee in place of water or add grounds at trace

- Comfrey Root - Light Milky Brown

- generally regarded as safe; be careful if taking anti-inflammatory medications as comfrey can absorb and increase blood levels

- Elderberries - Light Brown

- can cause several different types of allergic reactions, including skin irritation and rash - Steep in lye solution

- Milks - Orange/Yellow/Brown

- signs and symptoms of milk allergy include wheezing, vomiting, hives and digestive problems. Rarely, milk allergy can cause anaphylaxis — a severe, life-threatening reaction; label explicitly - Add lye to milk instead of water

- Oolong Tea Extract - Brown to Green

- generally regarded as safe - Infuse

Blacks and Greys

- Charcoal Activated - Black

- no reported health issues - Add 1 tbsp per pound soap at light trace

- Pumice - Grey

- no reported health issues

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Conclusion

Making your own soap is a fun, rewarding activity. You get to indulge your inner Mad Scientist and create something that not only looks, smells, and feels beautiful, but will have you and your loved ones feeling beautiful. Soap containing natural ingredients that are healthy for the skin and none of the dangerous chemicals so prevalent in commercial products will help detoxify yourself and your family. This is crucial when referring to children who can suffer lifelong developmental impacts from toxic buildup and exposure.

Not only can soapmaking leave you and your family healthier, but it can be a fun and lucrative career, as well. You are improving the health of the planet and you are bringing good health and joy to those around you. When you work from home doing something you love, your health improves in all ways: mentally, physically, and emotionally.

I hope this little book has been as fun, informative, and rewarding for you to read as it has been for me to write!

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Resources

Soapmaking information - the following sites contain valuable How-To information on making soap:

- http://www.soap-making-resource.com/
- http://candleandsoap.about.com/od/soapglossary/tp/Top-Information-And-Concepts-To-Get-Started-Making-Soap.htm
- http://www.millersoap.com/
- http://www.soapmakingfun.com/
- http://candleandsoap.about.com/od/tipstricks/qt/qtusingteasoap.htm (a fun article about using tea to color and otherwise enhance soap)
- http://www.awildsoapbar.com/store/pg/8-natural-soap.aspx (an informative article on natural vs synthetic soaps and ingredients)
- http://www.chagrinvalleysoapandsalve.com/ingredients/naturaladditives.aspx (an excellent article on therapeutic additives)

Where to buy bulk oils and fats:

- http://www.bulknaturaloils.com/Category/539-bulk-natural-oils.aspx - regular bulk oils
- http://www.bulknaturaloils.com/Category/538-bulk-organic-oils.aspx - certified organic oils
- http://www.soaperschoice.com/cgi-soaperschoice/Web_store/web_store.cgi?query_price_low_range=0&cart_id=$cart_id - a family-run business
- https://www.voyageursoapandcandle.com/category_s/44.htm
- http://www.naturesgardencandles.com/candlemaking-soap-supplies/category/848675/Soap-Oils-Butters-Waxes.html

Where to buy bulk lye: - keep in mind that you are normally using it in terms of ounces. It may be a great cost saving to buy a 50lb bag, but that sack of dangerous chemical has to be stored somewhere where it is *guaranteed* to stay out of the reach of children, pets, and unsuspecting others and also will *never ever* get wet. If a nearly-full 50lb bag of sodium hydroxide ever gets wet, Gremlins will be the least of your worries! Far better to buy a series of one- or two-pound solid containers with good lids.

- https://www.thelyeguy.com/store.php
- http://www.camdengrey.com/essential-oils/Soap-Making-Supplies-Lye/
- http://www.brambleberry.com/Sodium-Hydroxide-Lye-2-lbs-P3037.aspx
- http://www.aaa-chemicals.com/sodium-hydroxide.html (note how clearly they specify "food grade"!)
- http://www.biodieselbarn.com/SodiumHydroxide.html

Essential Oils - the following pages specifically address the use of Essential Oils in soap making

- http://www.soap-making-resource.com/essential-oils-for-soap-making.html (this page is *very* comprehensive!)
- http://backporchsoap.blogspot.ca/2010/01/top-five-essential-oils-for-soap-making.html
- http://www.soapteacher.com/StoreCategory.aspx?CategoryID=20&CategoryName=Fragrance+%26+Essential+Oils (soap making Q&A)
- http://www.soap-making-essentials.com/essential-oils.html#.Up_s7tK1zAk has useful information on blending scents
- http://www.soapqueen.com/bath-and-body-tutorials/tips-and-tricks/lori-novas-top-ten-essential-oils-2/ (a good blog on the topic)

Fragrance Oil information:

- http://www.soapmakingforum.com/forumdisplay.php?f=27 - a userful forum about fragrance oils

Where to Buy Fragrance Oils

- http://www.brambleberry.com/Fragrance-Oils-C161.aspx (a *wide* assortment!)
- http://www.naturesgardencandles.com/candlemaking-soap-supplies/category/0200/Fragrance-Oils.html
- http://www.sweetcakes.com/ (this is another popular name in the industry)
- http://soapmakingfragranceoils.com/
- http://symphonyscents.com/catalog/

Where to Buy Essential Oils - the following sites retail essential oils specifically for home soap making

- http://www.newdirectionsaromatics.com/
- http://www.brambleberry.com/Essential-Oils-C157.aspx
- http://www.camdengrey.com/essential-oils/Raw-Materials-Essential-Oils/ (each page is highly informative on the particular oil)
- http://botanicplanet.com/category-54-essential_oils_a_to_d.html (this site also carries a lot of information on each essential oil)

Where to buy Additives:

- http://www.thesoapdish.com/botanicals.htm
- http://www.pvsoap.com/herbs_botanicals.asp (they offer international shipping)

- http://www.soap-making-resource.com/soap-making-herbs.html (this site offers full kits so you can try out a number of products for one low price)
- https://www.thesage.com/catalog/Botanicals.html
- http://www.ebay.com/sch/sis.html?_kw=Dried+Herbs+%26+Botanicals+Extracts+Soap+Making+Additive+Crafts (the ever-popular ebay, allowing you to source globally from one convenient web page)

Where to buy Soapmaking Equipment:

- http://soapequipment.com/ (from tiny batches to humongous, plus they offer package deals)
- http://www.brambleberry.com/Soaping-Hardware-C206.aspx
- http://non-electric.lehmans.com/hardware/Soap%20Making (hardware mixed in with other supplies - a good all-around site)

 # # End # #